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THE
CURIOUS and PROFITABLE
GARDENER:

BY

JOHN COWELL,

Of HOXTON.

CONTAINING

I. The moſt uſeful Experiments for Improving Land by *Grain* and *Seeds*. p 1

II. Curious Directions for Cultivating the choiceſt Fruits of the *Eaſt* and *Weſt-Indies* at a ſmall Expence. p 21

III. Extraordinary Remarks concerning the Raiſing of Flowers from *Seed*. p 46

IV. Particular Obſervations and Rules for the Management of Dwarf Fruit-Trees, Wall-Trees, Eſpaliers, and Standards; with a new Method of rendering them more Ornamental and Profitable than is commonly practis'd. p 188

To which is added,

An exact DESCRIPTION of the Great *American* ALOE, its Manner of Bloſſoming, and Uſes; together with the Culture of that, and many other rare Exotic Plants; with an Account of the moſt beautiful Kinds of TORCH-THISTLES, and their Flowers, *&c.* Alſo the Hiſtory of the GLASTENBURY-THORN, and the peculiar Qualifications of that wonderful *Plant*. p 33 44

Adorn'd with CURIOUS FIGURES.

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30d

TO THE
Lady *WALPOLE*,
CONSORT to the Right Honourable
Sir ROBERT WALPOLE.

MADAM,

THE Extraordinary Productions of Your Ladyſhip's Gardens, leads me to addreſs theſe Papers to Your Honour; wherein, I hope, you will find many Obſervations tending to the Improvement of our Fields and Gardens, which have not yet reach'd the Publick.

As Gardening has been my Study above Thirty Years, I have endeavour'd to bring that Art to as great Perfection as poſſibly I could; and ſince my Labours that way have met with the Favour of the Curious Part of Mankind, it is my greateſt Ambition to publiſh them under Your Honour's Patronage.

I am,

MADAM,

With the greateſt Reſpect,

Your Ladyſhip's

Moſt Devoted

Humble Servant,

JOHN COWELL.

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THE CURIOUS and PROFITABLE GARDENER.

PART I.

CHAP. I.

Containing the Names and Characters of all the known Soils in England, *and their Improvement by Grain, Seeds, and Plants.*

THE Improvement of Land is of that high Importance to the People of *Great Britain*, that I am perſuaded the Obſervations I have made in that way, by Grain, Seeds, and Plants, will be acceptable to the Lovers of Farming; becauſe where Manure cannot be conveniently had, I can always make the Land Valuable by the Method I propoſe, be it ever ſo barren. I ſhall therefore examine the ſeveral Soils ſeparately, from the moſt barren Sand to the ſtiffeſt Clay, and appoint ſuch Plants for each Soil, as will render it profitable.

1. SAND *is either White, Yellow, or Black.*

White Sand is thought good for nothing, but Firr-Trees and Pine-Trees thrive very well in it. This Soil may be mended by any ſort of ſtiff Land laid upon it.

Yellow Sand is more rich, and will bear good Buck-Wheat, and is improved by laying the Haulm of the Buck-Wheat or *French*-Wheat, well rotted, upon the Ground; and then ſow Turnips, and after them Peaſe: this is alſo good for Carrots.

Yellow Sand is commonly more loamy than the former, and is excellent good for Potatoes, if it does not lie too wet; and if it is not over-wet, will bring good Crops of Liquorice, which are very profitable: So likewiſe will this Soil bring a good Crop of Madder, whoſe Root is of great worth for its ſervice in dying, tho' now little known in our *Engliſh* Farms: It is excellent for Turnips, and then will bear good Corn. We may lay ſuch Ground down alſo with Lucern or Medick Clover of the largeſt ſort, if it ſhould even lie a little moiſt; or the white flowering Clover will do well if it lies wet. But where this happens to be cold by Springs, open ſmall Cutts with the Spade to drain off the Water; and with the White Clover, either one way or other, ſow Ray-Graſs, which will make a laſting and rich

Crop. Upon this, if it is not over-wet, Hazel Coppices may be raiſed with good advantage. But if very wet, and on ſuch a Level as it cannot well be drained, ſet Alders, or Arbeles, or Sallows, which will ſoon pay good Rent: Or if indifferently wet, you may ſow Wold or Weld upon it, or Teazels, if you live near a Place where the Woollen Manufacture is encouraged. Drain it with hollow Ditching, and 'twill be good for Corn.

Black Sand: What I mean by this Earth, is ſuch as we frequently find in Heaths, which is very light, and *ſeeming Sand*, but mix'd with many Particles of Vegetables, rotted and diſpoſed like Earth; ſuch we find alſo in the Fenny Countries. If ſuch black Sand happen to lie dry, it is excellent for Saffron, and to ſow the *French* Berries upon for the Dyers uſe; both which would turn to good account, as well as Liquorice or Madder. But if it be black Sandy Soil, very much annoy'd with Waters, plant it with Reed or Oziers; or if Springs invade it too much, make Ponds for Fiſh, and raiſe the reſt of the Ground. And if the Ground is only ſubject to be moiſt and wet, and freſh turned up, ſow Cole-Seed, which turns to good Advantage; and it will then bring good *Poland* Oats. This Soil is an excellent Manure for Clay Ground, or Gravelly Soil; all theſe Sands are generally deep.

Of Gravel.

G*Ravelly Soil*, ſuch as contains a ſharp Sand in it, is none of the beſt, whether it is of a yellow or white Colour; it is ſubject commonly to bear unprofitable Herbs, but chiefly Broom. If this lie dry, then one Crop it will bear to Advantage is *French* Furze, in Countries eſpecially where Firing is ſcarce; or elſe *Spaniſh* Broom, which makes the beſt Faggots for mending of Roads, being the tougheſt of any Wood. The young Shoots make the ſtrongeſt Bands for binding any thing; and the Plants being cut down to a few Inches of the Roots, may be interwove in dry Fences, which laſt longer than any other. The Flower of this Plant is very beautiful, and of a fine Scent, and is very uſeful to Bees.

Gravelly Soil, again, being freſh turn'd up, will bear good Peaſe, and very ſweet Turnips, but ſmall in their Roots, and good for Sheep. This Ground is alſo good for Flax, which will grow very fine upon it; and then it will be fit to ſow Buck-Wheat upon, and black Oats may come after the Buck-Wheat. It is likewiſe good for Saffron.

If Gravel be wet, and ſubject to Whins and Mole-hills, cut down the Mole-hills in *December* or *January* with a Breaſt-Plough or Paring-Plough, and ſpread them abroad;

and you may, when it has lain till *March*, plow the whole, and ſow Horſe-Beans, and at the ſame time White Clover and Rye-Graſs. The Black, Heathy, or Mooriſh Soil mend theſe Gravels very much; and if afterwards you would ſow Corn upon them, the Land muſt be hollow ditch'd, or drain'd other ways.

This Land will bear good Teazels if they are wanted thereabouts.

The ſame Land being only moderately moiſt, will bring a Crop of Carraway-Seed to good purpoſe.

If it is very wet, Alders will do exceeding well in it, as well as Arbeles, and Willows or Sallows, and alſo the black Poplar, which in ſome Places are very uſeful.

If the ſame Soil has in it a ſharp Sand, in which it commonly chiefly abounds, there is no better Manure than that; for the ſtiffeſt blue Clay, or Clay of any ſort, it is as good as Marle in its way.

The *Gravelly Ground* is extremely improved by St. Foin and Clover, which may be ſown with Barley.

Gravelly Soil will likewiſe bring a good Crop of Lentils or Tills for Fodder and Seed.

The ſame Soil is alſo good for Tares or Vetches.

This Soil is excellent for Woods, or for Springs or Coppices of Aſh and Hazel; but if it be wet in ſome Parts, ſet therein Birch and Sallow; and in the more wet, Alder, Arbele, and ſuch like. Upon the hilly parts Beech will grow.

Gravelly Soil has generally Clay under it; if it be yellow Gravel, or if it be Gravel of a white ſort, we may commonly expect a Pit of Marle, if we dig for it. So that all the ſorts of Gravel commonly carry their Amenders with them; for the mixing of them together make good Land in time, fit for the beſt ſort of Corn.

Before I conclude my Obſervations on Sands and Gravels, I ſhall entertain my Reader with a Copy of an ingenious Letter communicated by a Gentleman of *Cambridge,* who receiv'd the Original from *Scotland.*

To Mr. Cowell, *Gardener at* Hoxton.

SIR,

'HEaring you are about printing ſome of 'your *Memorandums* concerning the 'Improvement of the *Eaſt* and *Weſt-Indian* 'Plants, as well as the Obſervations you 'have collected about amending the ſeveral 'ſorts of Soils, I ſend you a Copy of a Let'ter I have juſt receiv'd from *Scotland,* 'touching a profitable Plant which will proſ'per well upon poor Land.

I am Yours, &c.

The Letter is dated from *Bargaly*, near *Dumfries*, *December* 4, 1729. and begins thus.

'I Have endeavour'd to improve the Plant
'the *Romans* valued ſo much for the
'fattening their Cattle, call'd by them *Ci-*
'*tiſus*: Of all the Species of that Plant, that
'call'd the *Baſtard Sena* is moſt acceptable
'to all ſorts of Cattle, both Horſe, Neat,
'Sheep, Hares, Rabbits, *&c.* who eat it with
'very much delight. It is a Shrub that is a
'great Encreaſer by Suckers, and will over-
'run a whole Acre planted at two Foot and
'a half diſtance, in a little time; and when
'at ten or twelve Inches high, may be mown
'to great advantage thrice in the Year: and
'I never doubt but it will ſubſiſt for twenty
'or thirty Years, without being plow'd up.
'It takes beſt planted in the Stubble-Field
'after two or three Crops of Grain hath
'been taken off it; nor doth it leſs ſucceed
'in a poor Sand or Gravelly Soil, provided
'they be dry, even where other kinds of
'Graſs will not thrive.

'Nor is there any red *Dutch* Clover or
'St. Foine ſweeter to the taſte; and 'tis dif-
'ficult to preſerve it in the Winter from
'Hares, who make their way through
'Hedges.

'The Plant call'd the *Baſtard Sena* be-
'ing cut ſmall, and given among Oats to
'Horſes,

‘ Horſes, makes their Skin exceeding ſleek, ‘ and ’tis a great Fatner. It’s pity our Gentry ‘ and Farmers had not more knowledge of ‘ it, or that it were not more univerſally ‘ improved. If Gentlemen were once got in‘ to a Stock of the Plants, they might be in‘ creas’d to what Extent they pleaſe, and of ‘ long duration.

‘ I lately found out one Improvement of ‘ Potatoes, which I thought fit to acquaint ‘ you with, never before put in practice, ‘ which may be of univerſal Uſe to Farmers, ‘ and even to the meaner ſort of People, who ‘ have not the command of Dungs.

‘ The Method is thus: In *September* I ‘ cauſe Fern to be mow’d or cut down, or ‘ young Furze, where Fern cannot be had, and ‘ lay them a Foot thick upon the top of the ‘ Ridge I intend to plant the Potatoes upon; ‘ cover them at the bottom of the Furrow, ‘ where the Plow doth not come, with Virgin-‘ Earth half a Foot thick all over, and ſo let ‘ it lie till the firſt or middle of *March*; ‘ then dibble in the Potatoes about nine ‘ Inches aſunder, all in Rows over the Bed. ‘ And when they come up, and are grown ‘ to the ſecond Leaf, give them a gentle Co‘ vering, about an Inch in thickneſs, which ‘ deſtroys all Weeds, and makes them very ‘ productive. And theſe Ridges ſo managed ‘ next Year, being made ſo fat and mellow ‘ with the Stalks, will bring excellent Grain

‘ for two or three Years. Day-Labourers, ‘ that are not in a condition to procure Dungs, ‘ may by this Method have abundance of ‘ theſe Roots: and ’tis of great uſe to ordinary ‘ People when Victual is dear; and is a great ‘ Improver of ſuch Lands as are in the re- ‘ moteſt Parts of the Country where other ‘ Manure can’t be had conveniently.

‘ There is likewiſe an Expedient I’ve found ‘ out for ſweetning and qualifying the Air ‘ in the Green-houſe in hard Weather, with- ‘ out making uſe of Charcoal or Stoves, by ‘ chuſing a Stone about ſix Inches thick, and ‘ twenty Inches ſquare, and putting it to ‘ the Back of the Chimney-Fire till it is ‘ thoroughly hot, and taking it in a *Hand- ‘ Broad* or *Bachie* to the Green-houſe at ‘ Night, and ſetting it upon a Pedeſtal, it ‘ removes the ſharpneſs of the Air through ‘ the whole Night, makes the Greens look ‘ freſh and healthy; and by this Method I ‘ have brought Oranges to ſuch perfection, ‘ that they were full as Juicy at the Heart as ‘ thoſe that come from abroad. Sir, you’ll ‘ pardon this Freedom, being with the great- ‘ eſt Reſpect,

SIR,

Your very humble Servant,

A. Heron.

This Letter gives us a new Account of a famous Plant, and a great Improvement by it on poor Sandy and Gravelly Ground, of which ſort we have great ſtore in *Britain*, and would ſurely be of good uſe to be cultivated with us as directed; for I am inform'd by ſome *Scots* Gentlemen I have ſhew'd it to, that the Gentleman who wrote it is a Man of great Speculation and Truth. But I come now to ſpeak of Loamy Soil, which in every ſhape is very productive of any thing, whether as Sandy Loam, Marle, or Strict Loam.

The Sandy Loam is one of the beſt Sorts of Soil for Corn we have in *England*, and indeed for any thing elſe, where it happens to be deep enough, as ſix or ſeven Inches ſtaple, but it is commonly but ſhallow. 'Tis the admir'd Soil for Flowers, and if it is deep enough, the beſt nouriſhing Land for Carrots, Parſnips, Turnips, and ſuch like Roots; and for Woad, the famous Plant for Dying of Blue, which makes the great Foundation of many other Colours to make them laſt for a long Seaſon. The Corn-Fallows of this Land will bring good Crops of Spurrey upon them for Winter Fodder; and the beſt Peaſe of any, upon this ſort of Soil. Barley, if it is ſet at ſeven Inches diſtance, will bring ſuch a great Crop of Grain, that 'tis admirable; even ſo much, that an Acre will produce above half as much more as by the common way of ſowing. It is ſurprizing the Account we have of the vaſt Produce of Barley which the Reverend Dr. *Hollyar* of *Carſhalton* in *Surrey* has made, by the means of having the Grain or Plants ſet out in the manner I have mentioned, upon his Lands in that Country. But if I can rightly remember the Story of it, which a Gentleman of great Merit gave me, it was thus; *viz.* That from one ſingle Head of Barley being managed in the manner before related, the third Year produced enough of Corn to malt for ſixteen Hogſheads of ſtrong Malt-Liquor or Beer, which was ſo good, that the curious Gentlemen prefer'd it before Wine; beſides many Quarters of Grain that were yet ſaved for ſowing.

I am well perſuaded there is but little difference between what I relate, and what I heard of the Matter; but more than that, I find many Gentlemen of Underſtanding have taken the ſame way with Corn in ſeveral parts of *England*, and find it turn well to account in the pooreſt Lands.

If this Soil lies ſhallow, ſow it with Nonſuch, or with Lucern Seed, and lay it down.

Marle is accounted one of the beſt Improvers of Lands, but not of it ſelf to be good for any thing; yet, if People knew better what Marle was, they would find it upon the Surface, as well as in Pits, as it may be ſeen in many Places, of ſeveral Colours.

lours. When 'tis yellow, ſome call it Loam; when 'tis white, 'tis called ſoft or mellow Chalk; and when 'tis blue, 'tis a blue marly Ground: but when we dig for it, 'tis all Marle. For there are Marle-Pits common of all theſe ſorts; and every one who has ſeen the ſeveral Soils of our own Nation, muſt have ſeen the ſeveral ſorts of Marle on the ſuperficial part of Lands, as the ſtaple Ground of them. Where theſe Soils are found, they are rich enough for any Crop, if they lie naturally on the top of the Earth, to be uſed when we pleaſe: But if they are dug deep in the Ground, they muſt have time to imbibe the Air before they are made uſe of; which, by the common practice of the Farmers in marling of Ground, ſeems to agree with my Opinion, becauſe after the Marle is dug, 'tis broken again to fling into the Carts or Carriages; and then again at the delivery at the Field, and then at the ſpreading, and again at the plowing: ſo that the Parts are more ſpread and more open to receive the Air, than the ſame ſorts which we commonly meet with upon the ſurface of the Lands which are plow'd and open'd to the Air perhaps but once or twice a Year.

Memorandum, If we take Marle freſh out of the Pit, and ſow the Seeds moſt familiar to it, they will not grow upon it; but let it remain ſome time in the Air to mellow, it will bring any Seed to perfection. With this notice any one may know that I mean, *i.e.* Marle is a proper Soil for any Plant, when it has had Air enough to mellow it, and is deep enough to receive the Roots.

Marle, as well as any other free or open Earth, which is taken from below the Surface, as it is ſuppoſed not to have born any Crop, and has not the leaſt been diveſted of any natural Power, is judged to be that which the Reverend Mr. *Laurence* calls Virgin-Earth; or as ſome of my curious Acquaintance conſtrue it, ſuch Earth may be compared well with the Character that Gentleman gives of his Virgin-Earth. Notwithſtanding we find in the digging of ſome Wells, that the Earth which has been taken from an hundred Foot deep, has had perfect Seeds in it of ſeveral Varieties, that have grown when that Earth has been ſome time expoſed to the Air. Which denotes that there had been Plants growing upon that Earth before; or, as it may be, the general Deluge, or ſomething extraordinary of that kind, might, by its mighty Over-flux, have cover'd that Ground which was low before, and raiſed it now high enough to occaſion us to dig down to it for what we may want, meaning the Water.

LOAM is a Soil like that I have mention'd before in the Article of Marle; 'tis a fat, and yet eaſy and open Soil when it has been turned up a while, and expoſed to the Weather; and as it is generally deep, there is not known a more rich and fertile ſort of Land for any thing we can put into it, which requires a deep Root or ſtrong Nouriſhment. It is not ſo cloſe or cold to hold Water ſo long, as to ſtarve the Roots in the colder parts of the Winter; nor ſo free and open, as to loſe its Moiſture in the Heats of the Summer too quickly, as Clay would do in the firſt place, and Sand would do in the ſecond.

Neither is Loam of ſuch a hard Texture of Parts as to reſiſt the Roots of any Plant like Clay, or receive them too ſoon like Sand, both which are Faults in Soils; for conſidering the divers ſorts of Plants we muſt cultivate, as well the tender-rooted, as the hard-rooted, we muſt have light Soil for the firſt, and ſtrong Soil is more proper for the laſt. But this being ſomewhat leſs free than the Sand, and leſs tenacious than the Clay, all Plants will agree well enough with it, and every ſort live an eaſy Life therein; or make their way, like the middling Sett of People in a Nation, by ſlow and ſure means; while the hot-headed, like Sand, are too ſpeedily overthrown in their Attempts; and the too grave, like Clay, are never of any uſe till they are ſtirr'd up.

Where the Loam I ſpeak of happens to lie wet, and cannot be well drain'd, it will bear good Hemp.

In this ſort of Soil, or in any other of the Loams I have mentioned, the Everlaſting Pea may be ſown to great Profit, as a Gentleman of *Kent* has experienc'd. It affords an excellent Fodder for Cattle, and may be cut three times in a Summer. This Soil, with the cleaning of Ponds and Ditches, will bear very good Hops; but it is certainly the Soil that requires the leaſt help by any Manure of any other.

Of CLAY. *The White, the Yellow, and the Blue.*

THE White Clay is call'd in many Places ſoft Chalk; it has all the Qualities of the yellow Clay, except its Colour, and will bring very good Corn, by being well cultivated with the Plow, and manured, if it can be had, with black ſandy or heathy Ground, or Turff dug from Fenns; or, I have heard that Fern being cut down, and well rotted, makes a good Compoſt for it, mix'd with Drift-Sand. But above all, if you have Woods near ſuch Ground, take the Parings of the Wood-Soil and lay it upon ſuch Land in the Winter, and your Land will be as much improved as with the beſt Dung: Likewiſe the Folding of Sheep upon ſuch Land does it great ſervice. It will, when the Corn is off, bear a good Crop of Spurry upon the Fallows. Spurry may be had from *Flanders*; for about *Brabant*, I am inform'd by ſeveral Gentlemen, it is frequently ſown for fattening of Cattle, and making their Kine give ſtore of Milk. It is beſides, by all report, a great Fatner of Poultry; and will make them lay early in the Year, and bring great ſtore of Eggs. This Plant is call'd *Frank Spurry*, or *Franking Spurry*, from the Name which *Lobel* gives it in *Latin*, *Sagina Spergula*, which *Parkinſon* engliſhes Franking or Fattening Spurry, which Name the *Dutch* know it by.

This Soil likewiſe will bring a good Crop of Tills or Lentils; and alſo good *Dutch* Clover and Nonſuch.

The next ſort is yellow Clay, which is the moſt common, and very profitable, as the Gentlemen of *Hertfordſhire* and *Middleſex* well know. This Soil is the beſt for Corn, and brings the moſt profitable Graſs. Upon ſuch kind of Land one ought not to ſow any of the tender ſort of Seeds, leſt in the Winter the Soil be too cold for them. The *Poland* Oats will bring very weighty Crops; and every Plant which requires ſtrength of Soil, will proſper in this exceedingly. *Woad*, when this Ground has been open'd well by the Plow, and the Land has been help'd by ſome of the above Manures, will bring a valuable Crop. And this Land alſo is much improved by ſowing of Turnips, and feeding Sheep.

In *Yorkſhire*, and near *Bagſhot-Heath*, ſome Experiments have been made, as I'm inform'd, for mending yellow Clay-Ground, by a gritty Sand that was in the Neighbourhood. One Improvement of this ſort was made between two Gentlemen, Neighbours; one had a Field of ſtrong Clay, which brought him very little Profit; and the other a Field adjoining to it of a gritty Sand, which was ſo poor, that he hardly made Four Pence an Acre of it: till the Gentlemen mutually agreeing to exchange Soils, Load for Load, the Sand was carry'd to mix with the Clay, and the Clay likewiſe to lay on the ſandy Land; and in a plowing or two, being ſet with Beans, they bore the firſt Year a very good Crop; and were then plow'd again for Turnips, and fed with Sheep; ſo that the Spring following being plow'd, were ſow'd with Bullamond, which is Grey Peaſe and Barley together, and brought a great Crop. Since that, it has born very good Wheat, and each Field is reckon'd worth Forty Shillings an Acre.

Upon this ſort of Clay, if the Ground is dry, Aſh, Cheſnutt, and Oaks proſper exceedingly, if we ſow them on the ſpot; and upon the white Clay above-mention'd, Wallnuts and Beech will grow proſperouſly.

The next Soil I have to mention, is Blue Clay, which is the very worſt Soil of all, being ſo ſtubborn, that one muſt have a Team of good ſtrength to work a Plow in it. The beſt Manure for this is ſharp Drift-Sand and Heath, or Fenn-Soil, or rotted Fern, or ſuch like; for Dung would be ſoon loſt in it.

Some Gentlemen tell me, that to bring this Soil the ſooneſt to Tilt, or fit for Cropping, is at the firſt plowing, which ſhould be about *March* or *April*, as the Weather will permit; and then not to let the Plow turn up above two, or at moſt three Inches deep of the Land; and when that begins to dry, give it another plowing an Inch or two deeper, which will mix the Manure laid upon it before the firſt plowing, and make an extraordinary reduction of the ſtiffneſs of the Clay: ſo that about *July* one may ſow it with Turnips for Winter Feed, and afterwards will produce Beans, Oats, *&c.*

Some Gentlemen commend the planting ſuch Soil with Pear-Stocks, to let them grow in the manner of Coppice-Wood; and proſper ſo well in it, that one may cut them every five or ſix Years to ſerve for Stakes, Fences, and ſeveral Implements required about a Farm, beſides Firing when it is thorough dry.

There remains now no more to ſay of Soils, but to mention the dry Chalk, which ſeldom has a Staple upon it above two Inches thick, ſo that it can hardly be brought to bear any thing better than ſhort Graſs for the Feed of Sheep. But this we may ſay of the Graſs produced on ſuch Soil, that 'tis ſweet and very nouriſhing; and the Cows which can feed upon it, have more Cream in their Milk than the Cows that feed on long Graſs. Such a Place is good for a Warren, and will keep the Rabbits in good health, and make them very fat.

Nonſuch Graſs will bring the beſt Crop upon ſuch Soil, and by laying on Manure every Year, the Staple will riſe gradually by that means, and by the Increaſe of Roots, ſo that in proceſs of time it will be deep enough to bring Corn.

This Chalk is likewiſe good to burn for Lime, which is a profitable Commodity in every Country.

The yellow Clay will make good Brick, which again is very profitable, near great Towns eſpecially.

There has been Inſtances about *London*, of a Hundred and fifty Pounds, and more, given by Brick-makers, to take away three Foot deep of Clay from an Acre of Ground; and they were alſo obliged, when they had done, to bring in ſo many Load of Dung, or proper Manure, as would bring the remaining Ground into good order for Cropping.

On the other hand, theſe Lands, when the Brick-Earth is carry'd off to be burnt, will Lett to build on, or will Lett to lay Rubbiſh or Cleanings of Streets in, which will greatly enrich the Ground; and the People that rent ſuch Land for ſuch uſe, will ſell you, upon the ſpot, as many Load of the richeſt Lay-ſtall Soil as you pleaſe, for Sixpence a Load; ſo that after a certain Term, you may make your Ground as rich as you pleaſe.

Gravel, beſides what I have ſaid of it, is extremely uſeful for mending of Roads and Cauſeways, and where Veins of it are found, is of good account to the Owner. For tho' perhaps he may allow it to be dug at a Penny or Two-pence a Load at the Pit, for the uſe of the Roads about him, yet, as the Roads are mended by it, it will ſave conſiderably to him in the Wear and Tear of his Cattle and Carriages; nay, four Horſes in good Road, will draw as much as eight in a bad one, and this muſt be conſider'd as an Advantage to him, which is as good as ſo much Money in his Pocket. And if he has a large Eſtate thereabouts, the Farmers will be encouraged to bring more Manure upon his Land, and may make two Returns for one; and ſo they will proſper better, and his Eſtate become more valuable.

In Wood-Lands, where Roads are commonly the worſt, becauſe of the continual Shade of the Trees, which prevents the Sun from drying up the Wet that falls, and likewiſe the frequent paſſing of heavy Carriages contributes to make them deep, it would be well worth while to allow a certain part of each Coppice to be bavin'd or faggotted up to mend the Roads with; which will not only help the Cattle in their Draught, but eaſe the Carriages from great ſtrains and damage, and alſo ſave hurt to thoſe who paſs along them, and perhaps ſave ſome Lives; for in ſuch bad Roads as I ſpeak of, we too often hear of People ſmother'd in the Mud, and the Holes which are hidden by it.

What I have here mention'd, with regard to the Improvement of Soils, is every day more and more confirm'd by my Acquaintance who practiſe it: But I ſhall now proceed to ſpeak of the *Eaſt* and *Weſt-Indian* Fruits, which may be brought to perfection in our Stoves and Green-Houſes.

CHAP. II.

Of the Bonana *or* Plantain *of* Surinam, *or* Muſa Arbor *of* Parkinſon; *with others the moſt Extraordinary and Admirable Fruits, &c.*

THIS Plant brings not only one of the moſt delicious Fruits, but one of the moſt delightful Flowers of all the *Weſt-Indian* Rarities, as will appear in the Draught annex'd. It grows pretty tall, ſo that few of our Stoves or hot Glaſs-Caſes are big enough to hold it, eſpecially when it ſhoots for Fruit. Wherefore it will be neceſſary to adviſe thoſe Gentlemen who would delight themſelves in cultivating the fine *Indian* Fruits, to build their Stoves accordingly: For this Plant alone will grow in its Fruit-bearing State, to be about twelve or fourteen Feet high; but then it will well reward the Labours of its Nurſe, for at once it will bear ſeveral hundred Fruit of an exquiſite Flavour.

It is indiſputably one of the moſt beautiful Plants in the World; the Plant riſes to the Height of eight Feet, or thereabouts, with a Stem as thick as one's Arm, or rather bigger. This Stem is not Woody, but of a ſoft Subſtance compoſed of Leaves, or the parts of the Leaves of the Plant, like that of the Date-Tree. The Leaves are of a freſh green on the top of the Plant, and ſpread themſelves to a great compaſs, being made almoſt of the ſhape of our common Plantain, but about four or five Feet long each, and ſometimes two Feet broad.

From the Center of the Leaves comes forth a ſtrong and long Flower-Stalk, which riſes five or ſix Feet high, and jointed in ſeveral Diviſions; at each Joint putting out a Leaf-Caſe, which cover'd at firſt the Buds of the Bloſſoms that ſurrounded the Stem at the ſaid Knot or Joint. Theſe Leaves or Flower-Caſes are broad and large, of a Red Colour when they are open on the upper Side, and Blue underneath. The Flowers which ſtand round the Stem at every Joint are White, and ſomewhat ſhaped like thoſe of the Tuberoſe, as one may obſerve in *Marian's* Account of the Plants of *Surinam.* When theſe Flowers ſet for Fruit, the Leaf-Caſes fall off, and the next Story of Flowers above, open themſelves like the former; the young Fruit of the lower Range ſoon turning down, and perfecting themſelves in Fruit of the ſhape of ſmooth Cucumbers, but of very pleaſant Taſte; which when they are ripe, are of a yellow Colour. So the whole Flower-Stem is diſpoſed with Fruit to the very top.

In the Fruit, I find by my Correſpondents, there is no Seed, no more than in the Pine-Apple.

Thoſe Fruit which are gather'd by our Sailors abroad, to take to Sea with them, are always cut green, with the Stalk to them, which ripen by hanging up in their Cabins; and ſoon after their ripening, rot.

They eat them in the Country as a delicious Fruit, paring off the outward Skin, and then they emit a fine perfumed Flavour. And though they are not too ſenſibly ſweet at firſt, yet are of a moſt refreſhing Taſte. The People of the *Weſt-Indies* have likewiſe a Method of Preſerving them in Sugar like other Fruit.

This Plant, which frequently grows in the hotter Parts of *America*, brings its Bloſſoms and Fruit two or three times in a Year, and increaſes it ſelf by Suckers, which come plentifully about the Root of the Mother-Plant: The Fruit, ſome ſay, is much more pleaſant than that of the Pine-Apple.

I hope this may invite thoſe Gentlemen who have Dealings in *Jamaica*, and other Parts of the *American* warm Countries, to bring over, as occaſion may offer, ſome of theſe Plants. Which I the rather believe they will do, ſince many Noblemen and Gentlemen with us have good Conveniencies for their keeping. And I ſhall be grateful to any who will furniſh me with that Curioſity, as the Houſe I have built for my Aloe is of a ſufficient Height to bring the *Bonana* or Plantain to perfection, as well as the Mango or the Papa-Trees; which are likewiſe excellently eſteemed for their Fruits, and make tall Plants.

The Culture of the *Bonana* or Plantain, (for they are both one ſort of Plant) muſt be in ſuch a manner as we treat the *Ananas* or Pine-Apple; that is, they muſt have a continued Heat in their Stove during the Winter, by Fire; and ſhould have the Aſſiſtance of a good Bed of Tanners Bark to plunge their Pots in, during the Summer.

I muſt obſerve in this place, that when we propoſe to keep theſe like Plants in the Winter, to be ſtrong and vigorous, ſo as to bear good Fruit the Year following, we muſt not ſtifle them by too much heat, or too little room: For however they require Heat, they at the ſame time muſt have warm Air in a larger ſhare than what many have allow'd. And that Air too muſt be often refreſh'd; for by the help of a good quantity of Air, provided it be freſh and warm, equal with that in the Climate they come from, the Plants are well nouriſh'd, and will bring large Fruit. Whereas, if Plants are too much confin'd, the Air will grow hot and dry; which cannot feed a Plant that always chuſes an Air that is not devoid of its Moiſture. For the Philoſophers are agreed, that all Plants imbibe Moiſture by their Bark and Leaves, as well as their Fruits; which being kept in a dry, hot Place, will ſhrivel or ſhrink up: While, on the other hand, if they are laid in a Cellar or moiſt Place, they will keep full and plump. So much we know of the uſe Air is of to Plants; and, as another Inſtance, we find that Orange-Trees which are brought from *Genoua* without Earth, will remain ſix Months in a Cellar alive, enough to grow and ſhoot very well when they come to be put into the Earth. But if you keep them in a dry hot Room for a Month, as ſome have done, they will not grow at all. So, I ſay, every Plant ſhould have its proportion of Air to proſper.

With regard to the *Bonanas*, they ſhould have in the Summer Seaſon the open Air of the Houſe every favourable Day in *May*, till Sun-ſett. And in *June* and *July*, if the Winds are not turbulent, the Glaſſes ſhould be open from Eight in the Morning till Eight at Night, that they might have ſome Benefit from the warm Air and Dews. They might in theſe two Months be ſet out; but ſometimes ſuch high Winds and Storms happen at that Seaſon, as would deſtroy them; therefore 'tis hazardous to truſt them abroad. The Earth for them ſhould be light, and in the hotter Seaſon they will bear frequent watering, but in the Winter require little. Where Plants of ſo tender a nature, and of ſo high a growth, are not too Juicy or Succulent, and are aiming at Fruit-bearing in this Seaſon, which is now and then refreſh'd with ſoft Rains, one ſhould bring them out of the Houſe to receive ſuch Nouriſhment as the Heavens diſpenſe; therefore I think it neceſſary to ſet their Caſes or Tubs upon Wheels, as I have done my Aloe, that one may move them out and in at pleaſure: For the Leaves and the whole Plant will be refreſh'd by ſuch Moiſture, and by that means the Fruit will be better nouriſh'd.

This Fruit of the *Bonana* or Plantain, is ſaid by the curious Phyſicians to be very wholeſome, and of great Service to thoſe who are troubled with Colds or Catarrhs; it is Diuretic. They are excellent baked, and make one of the fineſt Sweetmeats known to the Gentlemen who frequent the Places where they grow. I proceed now to ſpeak of the Pine-Apple, and *Penguin* or Wild Pine.

Of the Ananas *or* Pine-Apple, *and the* Penguin *or* Shrub Pine-Apple.

THIS Plant, that is, the Pine-Apple, is a Fruit of that delicacy of Taſte, that it is cultivated not only all over the *Weſt*, but the *Eaſt-Indies*, and is one of the high Favourites of the Curious in Fruits. It was brought from *Surinam* and *Curaſao* to *Holland*, where it was firſt cultivated in *Europe*, and brought to Perfection by a Gentleman at *Leyden*, who rais'd in his Garden ſeveral hundred ripe Fruits of a good Size. From whom we firſt received Inſtruction to cultivate them in *England*, together with many Plants which he ſent to Sir *Matthew Decker*'s Garden at *Richmond* in *Surrey*; where they were ſo extremely well manag'd, that all Gentlemen who had eat of them abroad, allow'd them to be as good and as large as they found in the *Weſt-Indies*.

This ſoon encourag'd many of our Nobility and Gentry to build Stoves and Glaſs-Caſes for the Culture of the Pine-Apple; and

they

they are now found in almoſt every curious Garden.

When I ſay the firſt that were cultivated in *England* were in Sir *Matthew Decker*'s Gardens at *Richmond*, I mean, the firſt that were cultivated with Succeſs, were in thoſe Gardens; for long before we had Plants of them brought to us, but had not before that time Conveniencies for bringing them to Fruit, or even of keeping the Plants alive.

We have now two Sorts of Pine-Apples with us; one which brings a large Crown of Leaves on the top of the Fruit; and another which brings a very long and large Fruit, with a ſmall Tuft of Leaves on the Head on't.

The firſt Sort has its Leaves of a yellowiſh green Colour on the upper Side, and greyiſh underneath, but brings its Fruit of a good Flavour, though ſo ſmall as ſeldom to be above three or four Inches in length. When the Fruit is ripe, it is knobbed like the Cone of the Pine-tree, but ſoft in its Fleſh, and of a golden Colour, perfuming the Air about it. This Kind is the moſt ſubject to bear Fruit; even the Crown of Leaves taken from the Fruit one Year, will bear Fruit the Year following.

The other ſort of Pine-Apple has its Leaves more ſubſtantial than the former, and notched with ſmall Prickles on the Edges like

Aloe-Leaves. Theſe are of a darkiſh Green on the upper ſide, and pale on the under ſide; through theſe Leaves, length-ways, run Veins of a dark red Colour; and even the Scales of the Fruit partake of the ſame.

The Fruit of this is pyramidal, and often meaſures ten or twelve Inches in length, and is accounted to be the beſt ſort for eating; and therefore is called the King or Queen-Pine.

The Culture of theſe is the ſame, *i. e.* they are propagated from Suckers, which put out every Year from the Root; and alſo are rais'd and encreas'd from the Crown of the Fruits being planted.

The Soil for them ſhould be light, rich, and well ſifted; in this we may plant the Off-ſets when we ſee them large, any time during the Summer. And we may likewiſe plant the Crowns at any time when the Fruit ripens.

There is yet one Way of increaſing theſe Plants, which I obſerv'd at a curious Garden at *Mitcham* in *Surrey*, belonging to *Charles Dubois* Eſq; which I never ſaw elſewhere; *viz.* That Gentleman let ſeveral Fruit ſtand on the Plants a long time after they were ripe, and almoſt from every Knob of the Fruit there puſh'd out a young Plant; ſo that I believe there were Thirty upon one Head.

But to keep theſe Plants in perfection, and promote their Fruiting, we muſt plunge the Pots, from the middle of *February*, in a ſtrong Bed made of Tanners Bark, and keep them glaſs'd till the middle of *September*, giving them Air by tilting up the Glaſſes in the hotter part of the Day, and allowing them frequent moderate Waterings, eſpecially when the Fruit is ſet.

In *September* we muſt ſet them in their Stove for Winter, not keeping them too cloſe, not letting any Water drop upon their Leaves, or into the Heart of the Plants, for they are ſubject to rot. And when they are once in the Houſe, a conſtant Fire muſt then be kept, as equal as can be, which may be regulated by a Thermometer.

I obſerv'd before in the Culture of the *Bonana*, the way to make that Plant ſtrong, and bear good Fruit, is to give it a warm moiſt Air, rather than a hot dry Air; and to give it as much as its Tenderneſs will admit of, to keep it moderately growing; and not to force its growth too much, for that will make it weak. Juſt ſo ſhould we deal with the Pine-Apples, and not to keep them too cloſe, as many do, making them ſpend themſelves in Leaf, ſo that their Fruit comes ſmall, and of little Value.

As for the Manner of building ſuch Stoves, they are well enough known, and there are many Examples of them; and I find that the larger the Stoves are, the Fruit are generally larger. But I think, for the future, when any others are built, one would raiſe one part in the middle of each Stove ten or twelve Feet higher than the reſt, for the taller *Indian* Fruit-Trees, that they may bring their Fruit in perfection without being cropt: But the *Bonana* or Plantain-Tree cannot admit of cutting down, as its Leaves only are growing on the top of the Plant. Dr. *Bradley*, in his Deſcription of a Greenhouſe and Stove to be erected in one Building, ſeems to have contriv'd his Glaſs *Cupola* for ſuch Purpoſes.

But now I come to ſpeak of the *Penguin* or Wild-Pine, which ſome Authors call *Anana Sylveſtris*.

This Plant bears Seeds, and ſo is to be raiſed that way, as I firſt experienc'd in *England*; having receiv'd ſome from the *Weſt-Indies*, and rais'd ſeveral Plants in a hot Bed, as did ſome others I gave them to; ſo that there are now ſome to be found in our curious Gardens.

This Plant appears from the Seed like the Pine-Apple, with Leaves ſet round in the Form of an Aloe, but much more notch'd on the Edges. It is no leſs tender than the other ſort, and muſt be kept in as warm Stoves, and under the ſame Management.

Out of the Center of this Plant riſes a ſtrong Stem, which proceeds to the height of ſeven or eight Foot, or more, as Authors deſcribe it. The main Stem puts out ſeveral Branches, bearing at their ends Heads of ſoft tender Leaves cloſed round together; which are of a yellow Colour, and extraordinary pleaſant to the Smell. From whence proceed Spikes reſembling thoſe of the Reed, but much thicker, and much more beautiful, which carry the ſcent of Cedar. From the Branches hang down the Fruit call'd the *Wild-Pine*, or by the People of *Brazil*, *Ananas Bravas*, which are ſomewhat ſhaped like the Fruit of the former kind, about the bigneſs of a Melon, and of a beautiful red Colour. The Fruit, when ripe, has a pleaſant Tartneſs in it, agreeable to quench Thirſt, and recreating to thoſe that eat of it.

I am aſſured by the Gentleman who brought the Seeds of this Plant to me from the *Weſt-Indies*, that the following Virtues, aſcribed to the Fruit of this Plant, are certain, which from his own Account I ſet down. Firſt, That about a Quarter of a Pint of the Juice of the Fruit, taken in a Morning with a little Sugar, is an immediate Remedy againſt the Heat of the Liver, or any Pain of the Back proceeding from Gravel or the Stone; and alſo is a certain Remedy for Ulcerated Kidneys; or where the Urine is foul and purulent, or the *Penis* has any Excoriations,

tions, it certainly cures in three times taking. In a word, the Beauty and Agreeableneſs of the Plant, as well as the extraordinary Uſe made of it, will not, I believe, contribute a little to the Culture of it in our Stoves; as, I ſuppoſe, every one who knows its Perfections, will be deſirous of Cultivating it.

It is ſuppoſed by ſome of my Acquaintance, that the Heads, which are like thoſe of the Reed, as above-mention'd, ſerve as Male-Bloſſoms to the Plant; and that the Fruit which appear on other parts, come from diſtinct Female-Bloſſoms. But I hope to be able to ſhew this in a little while in my own Garden.

Of the Papa-Tree *of the* Weſt-Indies.

THIS Tree brings us one of the moſt extraordinary *Weſt-Indian* Fruits, of a good Subſtance, and very pleaſant to the Taſte, as well as beautiful to the Sight. We have had the Plant raiſed in *England* many Years ſince, when firſt Exotic Gardening was ſet on foot by the late famous Dutcheſs of *Beaufort*, and Dr. *Henry Compton*, Biſhop of *London*. And within a few Years, ſince our new Stoves have been built, the Curious in the Pine-Apple way, have cultivated it from Seeds which were brought from the *Weſt-Indies*; of which I have rai'd ſeveral that I ſold to good Advantage. This Tree is a very quick Grower, and will bear Fruit from the Seed in three Years, with good Management. But it is remark'd by ſome, that there is of this Tree both Male and Female; for that from Seed of the ſame Fruit, we find Plants that bring Fruit from the Bloſſoms coming upon them; and others bring Male-Bloſſoms, which are never follow'd by any Fruit, ſuch as is reported with Truth of the Dates or Palms. When I mention this, 'tis with regard to the New Doctrine of the Generation of Plants, that it may be an Example for the Curious to diſcourſe upon.

From ſome Seed of the *Papa*, which I gave to the Phyſick-Garden at *Chelſea*, were raiſed two Plants, one of which produced Flowers, which proved to be Female: But the other Plant which was raiſed there at the ſame time, was ſold or given away to a Gentleman at *Parſon's-Green*, that produced only Male-Flowers; and ſo the Female Plant brought no Fruit.

However, at Mr. *Sherrard*'s Garden, and at thoſe of ſome other Gentlemen who had of thoſe Seeds, there was good ripe Fruit the third Year after ſowing; which proved very delicious and full, though the Plants were hardly nine Feet high, and bearing many upon a Tree.

This Tree muſt be trained up in a Bark Bed, like the former *Weſt-Indian* Fruits, and have the ſame Benefit of a like Stove in the Winter: Their Earth ſomewhat more loamy than that I directed for the Pine-Apple, with gentle Waterings, till the Papa-Tree grows woody, and then they may have more frequent Watering in the Summer; but be more ſparing of it in the Winter, leſt they take the Mold in the young Shoots, and rot, which is the great Danger.

This Plant is well known in all our *Weſt-Indian* Plantations, where the Heats are great, ſuch as *Jamaica*, and other hot Places thereabouts; from whence any Seeds or Plants of the like kind will be very acceptable, and gratefully acknowledged by me to any who ſhall bring them over.

Of the Guava-Tree *or* Shrub.

THIS Plant is common in our hotter Plantations of *America*, and brings an excellent Fruit, and bears it in plenty. The firſt of this that I have heard of that ripen'd its Fruit in *England*, was at *Badmington*, the Seat of his Grace the Duke of *Beaufort*, in that famous Lady's time, who began Exotic Gardening in *England*.

This Plant, in the Country where it grows, is a Shrub; but by her Grace's fine Greenhouſes, grew to about ſixteen Feet high, and bare ſeveral ripe Fruit at *Chriſtmas*. The Fruit, in appearance, were like Apricots, and of a very delicious Flavour, as I have been informed by ſome Gentlemen who have taſted of them. Her Grace, the Gentlemen tell me, had them brought to Table freſh from the Tree, and had ſome others preſerved in Sugar, but I have not heard of any ſince, of that Fruit, that have ripen'd in our Gardens, though ſeveral have bloſſom'd. I believe that the Stoves where they have lately flower'd are much too ſmall to contain Air enough for ſwelling the Fruit; for all Fruit-Trees, if we force them, and do not give them a good Body of Air, will drop their Fruit, e'er the Fruit is half grown.

This Plant of the *Guava* will bloſſom about the third Year from Seed, if it be well managed; that is, to raiſe the Seed in a Bark-Bed, giving it ſuch treatment there the firſt Summer, as we uſually do to the Pine-Apples, and keep it in as warm a Stove in the Winter; but it will, after the firſt Year, require more Water. Such Soil as we give the Pine-Apple is proper for this.

Of the Mangas, *or* Mango, *or* Indian Honey-Plumb.

THE *Mango* is eſteem'd one of the choiceſt Fruits of the *Eaſt-Indies*, growing upon a handſome Tree, bearing Leaves almoſt like thoſe of a Peach-Tree, and putting forth the Flowers on Strings, as the

Bird-Cherry does. After theſe follow the Fruit, each as big as a ſmall Melon, the biggeſt weighing about thirty Ounces; of a greeniſh yellow Colour when ripe, and bluſh'd with red on the Sunny-ſide, on a ſhining ſmooth Coat.

This Fruit, when it ripens, yields a moſt grateful Flavour, and is not inferior in its taſte to the moſt delicious Fruits of the known World. It has a large Stone in it, which encloſes a Kernel, from whence the Tree may be raiſed. It is remarkable that the Fruit of this Tree does not all ripen at the ſame time; but we may ſee at the ſame Seaſon ripe and green Fruit, and ſometimes Flowers on the ſame Tree. This Account was brought by a Gentleman who had it from his Friend at *Iſpahan*, the chief City of *Perſia*, where ſome particular Perſons have it growing. It is there call'd *Amba* and *Ambu*.

This famous Tree naturally grows about *Malabar* and *Bengal*, *Malaca*, and *Goa*, in the *Eaſt-Indies*; ſo that it requires a Pine-Apple Heat to train it up with us, that is, ſuch Bark-Beds and Stoves as are preſcribed for the foregoing Plants.

About two Years ago a Gentleman brought over two Plants of this kind in good Health; but for want of proper Stoves to keep them in, they both died the ſame Year. We find this Plant likewiſe in ſome of our hotteſt *Weſt-Indian* Plantations, tranſplanted thither from the *Eaſtern* Parts of the World; ſo that we may ſurely get them eaſily from thence, for I hear 'tis generally cultivated by the Gentlemen of *Jamaica*.

When the Fruit is green, the *Indians* after having pared off the Skin, pickle it in the manner we meet with it in the Oil-ſhops at *London*.

When it is ripe they eat it as a choice Fruit, firſt taking off the Skin of the Fruit, though it is very thin, and ſometimes eat it with Wine. It is alſo preſerved as a Sweetmeat in Sugar, being gather'd juſt before its full ripeneſs. But the Merchant who tells me of this, ſays, that the ripe Fruit alone cannot be mended in its Taſte by any Art.

There is a notable Story goes of the Mango, that the *Indians* have a way to ſet a Stone of this Fruit, and in half an Hour it will ſhoot forth Leaves, and bear Fruit. This has been a long time related as Fact by many who pretend to have ſeen it; and amongſt the reſt, Men of the firſt Rank, who have been there. But how it is performed, (that is) the raiſing of a Tree ſeemingly to bear Fruit in ſo ſhort a ſpace, has hitherto been only a Surprize, and not known.

The *Chadock-Orange* of the *Weſt-Indies* is the ſame with the *Pumplemus* of the *Eaſt-Indies*; but being brought firſt to *America* by Captain *Chadock*, as a curious Fruit, the

People of that Country gave it his Name. It is much admir'd for its fine-flavour'd Juice, and the large Size and great Beauty of its Fruit. The Fruit of this Plant commonly brought to us from the *Weſt-Indies*, is near ſeven Inches Diameter, or twenty-one Inches about, and ſometimes larger. It is every way ſhaped like an Orange, and of a pale Colour like the *China*-Orange. It is plentifully ſtored with Juice of a delicious taſte; and the Seeds of it grow well with us, if we plant them in Pots of fine Earth, and plunge the Pots in a Bark-Bed early in the Spring; that is, about the middle of *February:* but they ſhould be ſown before they are dry, for elſe they will run a hazard whether they come up at all. Or if they ſhould happen to be dry before we have them, we may lay them the Night before we plant them in ſome of the Pulp of Oranges, and mix that Pulp with the Earth we plant them in, or lay that Pulp over the Seeds when we ſet them in the Pots to lie thin, and then cover the whole with fine Earth. This will bring them up ſtrong; but much ſtronger will they be, if they are put in freſh from their own natural Juice.

It has been experienc'd, that the Seeds of a rotted Fruit ſhoot much the ſtrongeſt; and 'tis very remarkable, that theſe Seeds, when they are grown about five or ſix Inches above ground, will bloſſom; that is, bring a ſingle Bloſſom upon their Head: but that is not conſtant, as I obſerved at Dr. *Monroe*'s at *Greenwich*, where I ſaw ſeveral of the young Plants that were without Bloſſoms, tho' many of them bloſſom'd very ſtrongly; and I doubt not might have held their Fruit, if they had had ſtrength enough at the bottom, or could have been join'd with a ſtronger Plant.

This Manner of flowering ſo ſoon from the ſowing of the Seed as three Months, is very extraordinary, and what is not ſeen in any other Plant that is not an Annual; for none of the Fruit-bearing Trees, that I know of, does the like.

The Leaf of this Plant is of an enormous Size, when it has the Encouragement of a ſufficient warm Entertainment; but 'tis obſervable, that we have not this Plant brought to the Perfection in *England* as we could wiſh: for though the green Fruit will grow as big as a Man's Fiſt, yet it will drop off in the Winter, when it ought to ſwell for ripening. The reaſon is, becauſe they have not the benefit of a Stove in the Winter, which they require as much as the *Bonana* or *Plantain*, or any of the *Eaſt* or *Weſt-Indian* Fruits, and ought to have the ſame Encouragement all the Year about; only the Glaſs-Caſes for theſe ſhould be large, and hold a greater Quantity of Air, than thoſe which are generally built for Pine-Apples.

It is nevertheleſs certain, that the Tree will live abroad, where we ſet out our Orange-Trees, and ſet its Fruit there; but when that is done, we muſt always provide for it ſuch a Warmth, when the Fruit is ſet, as may keep it growing till it ripens: for if the Tree meets with any check, during the time of the growth of the Fruit, the Fruit certainly drops.

As to the reſt of the Management of this Plant, as it is of quicker Growth than any other kind of Orange, it may be allowed a larger Pot or Tub. The Earth ſhould be light, and it will bear frequent Refreſhings of Water, but not a great deal at a time.

There is another ſort of this Plant, call'd the *Cluſter Chadock*, or *Noſegay Chadock*, which brings its Bloſſoms in Bunches at the Head or Top of every Shoot, to the Number of twenty, and ſometimes thirty in a Bunch. This is pretty rare among us; and for want of ſuch Rules as are here laid down, it brings no Fruit to Perfection, or explains its Leaves to near the Size one ought to expect them: but, on the contrary, all thoſe I have ſeen, bring their Leaves leſs than the foregoing kind, and are of a yellowiſh Colour. The Pots or Caſes of this, as well as the other, ought to be at leaſt one third larger than one would allow to a common Orange-Tree; and it ought likewiſe to have a good ſhare of Heat in the Winter.

Of the Dwarf Pomegranate.

THE *Dwarf Pomegranate*, however ſmall the Plant is, yet the Fruit is near as big as that of the large ſort, and no leſs pleaſant to the Taſte. This little Shrub is an extraordinary Bearer, and ripens its Fruit very well with us in *England*, as a Gentleman aſſured me, who firſt brought it from *France* into *England*, and from whoſe Plant all that we now have were raiſed, either from Seeds or Layers. But however it has happen'd, we find that the Management of thoſe who have raiſed it from the Mother-Plant, have not brought it to bear Fruit like that which was firſt brought over.

The Gentleman who firſt brought it among us has told me ſeveral times, that the reaſon why the other Plants do not bear Fruit, is, becauſe every Perſon in whoſe Cuſtody he finds them, train them abundantly too tender; for it is common with them to put the Plants into Bark-Beds, to raiſe them to a large Size, or bring them forward, and that makes the Plants ſhoot tenderly, whether they are raiſed from Seeds or Layers: while, on the other hand, when we raiſe ſuch Plants which come from a moderate Climate, they ought not to be forced, but ſuffered to grow gently, and then their Shoots will be well knit, and the Fruit will ſtand and ripen.

It is obſervable, that this Plant will produce Bloſſoms when it is not above four Inches high ; but, at moſt, this Shrub, if it has all the advantage of Growth, does not grow above two Foot and a half at moſt in forty Years.

It is its Cuſtom to bring Bloſſoms on the Heads of the Shoots, and they appear there when the Plant begins to bud in the Spring, ſo that they have time enough to ſet and ripen their Fruit in the Summer following: But few of the common ſort attempt to bloſſom till the end of the Year, which make them rarely bear Fruit. However, there is ſomething in the pruning of the common ſort which I find is not generally known, and therefore ſhall ſet it down here, that my Brother Gardeners may take notice of it.

The common Pomegranate is, for the moſt part, clip'd or cut into ſome ſhape or faſhion, if 'tis in a Pot, and then all the Ends or Points of the Summer Shoots are cut off, which ſhould bear the Bloſſoms: And in the next place, thoſe which are ſet againſt Walls, without regard to their bearing Fruit, are clip'd or cut as one would do a Phyllirea; the Perſons not thinking ſo much of the Flower or Fruit, as they do of the handſome Appearance of the Plant, and ſo diſmember the Plants of their flowering Tops: But whereever you find that a Plant of the common Pomegranate has run rude againſt a Wall, as ſometimes happens, you will ſurely find it produce Flowers, tho' not to bring Fruit, becauſe it wanted the Warmth of the Wall to forward or ſet the Bloſſoms, and to make the Fruit grow. In the next place, we obſerve that the ſame ſort of Plant, when it happens to be under the Hand of one who will take the pains of laying to the Wall the Shoots of the laſt Summer, they commonly eſcape the Winter ſo well, as to open their Bloſſoms about the End of *May*, or Beginning of *June*; and then 'tis likely there will be Fruit, if the Autumn be favourable: but not of that fine Ripeneſs as we receive them from *France*, or as we find on the Dwarf Sort now with us; as ſome Noblemen and Gentlemen intimate, that have ſeen and taſted of thoſe growing on the firſt Plant brought over of the Dwarf Kind.

We have had, however, Inſtances of the common Pomegranate ripening in *England* againſt Walls, when the Winter before has been ſo mild, that it did not kill the Ends of the Shoots, and the Spring and Summer has been favourable afterwards; or that they have been guarded with Mats in ſevere Seaſons, as at Sir *Gregory Page*'s at *Greenwich*, and at *Kue-Green*. If the Pruning therefore, and a little Care in the Winter be minded, it is likely even theſe may be brought to bear good Fruit; But the Dwarf Sort is certain, if you ſhelter it only in a common Green-Houſe, and give it Air enough; or, in a word, the ſame Care you would give an Orange-Tree; or even leſs than that, for 'tis as hardy as a Myrtle.

The Dwarf Kind begins to bloſſom, if it be well managed, in *April*; but if it be too warm kept, will ſhew its Flowers in *March*, but then they will be weak, and perhaps never ſet, or drop off: But the *April* Flowers will ſtand, eſpecially if they ſet while they are abroad, which ſhould be about the middle of *April*, under any common Penthouſe: they will then require frequent Refreſhings of Water; and their Earth muſt be of ſuch a Texture as Sandy Loam, which is the beſt for them. A Sandy Loam freſh, without any Dung, is the beſt; and they ſhould be earthed every Spring, without diſturbing the Roots, and then you will ſee whether they require new potting, for a Pot may contain too ſmall a Quantity of Earth to ſupport the Fruit or Bloſſom; but you will know when a larger Pot is wanting, when you ſee the Roots many, and cloſe to the Edges of the Pot.

Surely nothing can be more dazling, than to ſee a little Tree of this ſort, not above a foot high, cover'd with its fine Crimſon Bloſſoms; or can be more pleaſant, than to have ſuch a Dwarf brought to Table with half a Dozen ripe Fruit upon it.

CHAP. III.

Curious Remarks relating to Flowers.

BEFORE I ſpeak of the Management of the choice Sorts of Flowers, ſuch as Tulips, Ranuncula's, *&c.* I think it neceſſary to inſert the following Letter I receiv'd from a Curious Gentleman, concerning the naming of Flowers, whereby not only they may have pompous Names, as they generally now receive; but the ſame Names ſhall likewiſe expreſs the ſeveral Colours in every Flower: ſo that, without having them painted, one may know by each Name every Colour which is remarkable in each Flower, and which Colour abounds in it.

To Mr. Cowell, *Gardener, at* Hoxton.

Mr. Cowell,

' I Have been a Lover of Flowers above ' twenty Years, the greateſt Part of ' which Time I have lived in *France* and ' *Flanders*: I am however of *Engliſh* Birth, ' and ſhall endeavour to explain to you the ' ſeveral Methods we have abroad of naming our Choice Flowers, ſo that one may ' know, by ſeeing any of the pompous ' Names we give them, what Colours they

‘ are of: but ’tis not the way in *England*, I ‘ find, to do ſo; for they give the Flowers ‘ Names at random, without conſidering ‘ that every Flower’s Name might carry ‘ with it a Mark of its Colours.

‘ Abroad our very Curious Floweriſts have ‘ Liſts of all the great Perſonages, Caſtles, ‘ and Cities by them; and when a good ‘ Flower happens to come in their Garden, ‘ they give it a Name from them that ſhall ‘ in the two firſt Letters ſignify what Co‘ lours it is mark’d with: and ſo when they ‘ read their Catalogues over, every Name ‘ is, as it were, a Painting of the Flower. ‘ The Method is, to make a Table as fol‘ lows, *viz.*

For White, put the Letter *W*—or *A* for Argent.
For Yellow put —— *Y.*
For Orange —— — *O.*
For Red —— —— —— *R.*
For Crimſon —— — *C.*
For Purple of a Reddiſh Caſt *P.*
For Violet Colour —— *V.*
For Blue —— — *B.*

‘ And if you have any *Black* in a Flower, ‘ *that is*, Sable, and may be therefore ‘ repreſented by the Letter *S.* becauſe ‘ we have *B* already for Blue.

An Example of Naming Flowers after this Manner.

‘ A Flower perhaps with White abounding, ‘ and mark’d with Crimſon, may be ‘ called *William the Conqueror*; the *W* in ‘ *William* expreſſing the White abounding, ‘ and the *C* the Crimſon: or, in a different ‘ manner, the ſame Flower might be named ‘ the *Wonder of Conſtantinople*, where the ‘ *W* and the *C* denote the Colours.

‘ A Flower ſtriped with Crimſon and Purple, ‘ may be called the *Charming Phyllis*, ‘ or the *Curious Ptolemy*, the two firſt Letters ‘ denoting the Colours, always underſtanding ‘ that the prevailing Colour is expreſs’d ‘ by the firſt Capital Letter: So in a ‘ Flower where the *Violet* prevails, and the ‘ other Colour is *Orange*, one may name it ‘ *Victorious Orlando*, or the *Virtuous Oreda*. ‘ Where the Colours are Blue and Red, ‘ the Name may be the *Beautiful Rodolinda*, ‘ or the *Britiſh Rover:* and for Yellow ‘ and Purple, one might name the Flower ‘ the *Young Prince*; or White and Purple, ‘ the *Wiſe Prince*, and ſo on.

‘ The Curious abroad have now, for the ‘ moſt part, this ſort of Catalogue; and if ‘ they happen to meet with old Flowers ‘ that are not named after this manner, they ‘ add a Character which expreſſes their Colour:

‘ lour; as in the Flower called *Ducheſſe*
‘ *d’Avero*, which is *White* ſtreak’d with *Vi-*
‘ *olet*, and which Name ſingly denotes none
‘ of the Colours the Flower bears; but as
‘ *Blanc* in *French* ſignifies *White*, and the
‘ *Violet* is the ſame in *Engliſh* as in *French*,
‘ ſo they add to the Name, by way of Di-
‘ ſtinction of Colour, *Bonne Veuve*; which
‘ ſignifies a *Good Widow*, as herſelf was al-
‘ low’d to be: and then *B* in the *French*
‘ Word *Blanc*, which is *White*, expreſſes that
‘ Colour; and *Veuve*, whoſe firſt Letter ſig-
‘ nifies *Violet*, is Mark ſufficient for the
‘ Floweriſt to diſtinguiſh by. So may we add
‘ a Character to any Flower already named in
‘ *England*; as for Example, the fine Carna-
‘ tion, which is called the *Princeſs Amelia*,
‘ whoſe Principal is *White*, and mark’d with
‘ *Violet*: To this might be added, the *Wor-*
‘ *thy Virgin*, taking the Colours of the
‘ Flower from the two initial Letters; which
‘ ſhew from the *W* the chief Colour is *White*,
‘ and the other in *Virgin* denotes *Violet*.
‘ And by this means you will always know
‘ the Colours of your Flowers, by writing
‘ the Names of each ſort on ſome piece of
‘ Wood, *&c.* and placing them in each Pot:
‘ So that whenever you ſee theſe Names,
‘ you will remember what Colours every
‘ Flower carries with it. One might bring
‘ many more Examples, which I have from
‘ ſome of the *French* and *Flemiſh* Cata-

‘ logues, but I gueſs theſe will be ſufficient
‘ to inform you of the Deſign; and ſo I con-
‘ clude,

Your moſt Humble Servant,

P. BELANDINE.

As to the naming of Flowers in this manner, it is, without diſpute, ſomething new to us in *England*, and carries with it a neceſſary Explanation of the Colours of each Flower. I believe every Floweriſt, in the common way of naming Flowers with us, is ſome time or other at a loſs to deſcribe the reſpective Colours of each Flower, when it is out of Bloom, and the above Letter directs us well enough to know them by looking on our Catalogue. But I come now to ſpeak of the Tulip, and its Management.

One of my Curious Correſpondents informs me, that the Tulip was brought to us from *Dalmatia*, in the Year 1560, by the Famous *Geſner*, and was then called in that Country the *Grand Turk's Turbant*. He adds, by way of Remark, that it is a Query, whether what we call the Tulip, was not the Lilly of the Field mention'd in the Scripture, as it is a beautiful Flower, and grows wild in that Part of the World; but then ſays, the Ranuncula's grow wild at the ſame Place, remarking alſo that he ſuppoſes that the Word *Lilly* is a general Name, as the Word *Roſe* is, neither denoting any particular Flower; but in common the Lillies were herbaceous Plants, and the Roſes flowering Shrubs; perhaps the firſt with more Beauty than agreeable Smell, and the latter had Beauty, and was odoriferous.

But as all our fine Tulips come originally from Seed, it will be neceſſary to ſet down the Method of making Seminaries of that Flower, and planting as well as taking that Bulb out of the Ground.

I obſerve, that as ſoon as the Seed-Veſſel of the Tulip is fully ripe, and the Leaves of the Plant are turn'd yellow, the Fibres at the bottom of the Bulb decay; 'tis then a time when we may take it out of the Ground, and one may from that time to the middle of *Auguſt* do the ſame, without injuring the Bulb: for when the Bulb has no Fibres to it, we may take it from place to place without Injury.

We may alſo obſerve, that notwithſtanding a Tulip-Root will begin to put out its Fibres, if we leave it in the Ground, towards the End of *Auguſt*; yet if we keep the Bulb out of the Ground till *February*, in a dry place, it will not put out one ſingle Fibre: and then if we plant the Bulb, it will in a Week's time fling its Fibres out plentifully: nay, even if one ſets the Bulb upon an wholeſome Liquor,

quor, it will do the ſame, and bring its Bloſſom as regularly as another planted in the Ground; which I have try'd, not only in the Tulip, but all the common ſorts of Bulbs. We muſt however obſerve, that the beſt time of planting the Tulip, is, when Nature would diſpoſe the Bulb to make Fibres, if the Root had remained all the Year in the Ground, for then the Flower will be the ſtronger: nevertheleſs, the Tulip-Bulb, in whatever Seaſon we take it, will give us its Flower, ſo as to be known by an Artiſt; but then if we keep the Root late out of the Ground, the Root will hardly blow the following Year: and if we leave the Root in the Ground, it will be apt to fling out Off-ſets, and the principal of them will, from year to year, ſtrike deeper and deeper in the Earth; ſo that in a few Years we ſhould ſee nothing of them but ſingle Leaves, and the Roots then to be taken up would be ſuch as would not produce Flowers in two or three Years. And 'tis to be noted likewiſe, that if we let them ſtand long, the Maſter Bulb will frequently rot.

When we find Tulips in the Condition that we have nothing but Off-ſets, which one may diſcover by the ſmall Leaves they produce, then have a regard to the Roots when the Leaves decay, and take them out of the Ground, and immediately replant them in a good prepared Bed, interring them in ſuch a manner, that the Surface of the Earth is not above half, or at moſt, three quarters of an Inch over them: but indeed as they are larger or ſmaller, their Depth ought to be conſider'd; the very ſmalleſt ſhould not be cover'd above half an Inch, the middling three quarters of an Inch, and the blowing Roots of Tulips an Inch at moſt, for they are too apt to run deep in the Ground; and as Nature ſhews us, in the Phyals I have them in, the Earth is only neceſſary to feed their Fibres, and not the Bulbs; for the Bulbs in my Bottles are expoſed to the Air, and it is too often the Bulb of a Tulip rots in the Ground.

Theſe are neceſſary Memorandums to thoſe Gentlemen who are Lovers of Tulips; and moreover I may ſay, it ſhews that a Tulip loves a ſimple Soil to lodge its Bulb in, whatever one may place beneath for the Fibres to ſtrike into.

When ever we take up our Bulbs, we ſhould immediately diveſt them of the Off-ſets, and replant thoſe Off-ſets the ſame day at four Inches diſtance, in a freſh Soil, well ſifted; for if we run the hazard of letting them dry, as we do the great Roots, we ſhall loſe half of them.

A *French* Gentleman obſerves, that ſuch Off-ſets of Tulips as weigh a *French* Crown in Gold, will bring a Flower; or ſuch Seedling Roots of Tulips as weigh ſo much, we may expect Flowers from the firſt time of their ſhooting.

To preſerve your Tulip-Bulbs from the time of taking up, to the time of their replanting, waſh them clean from the Earth, and dry them well in the Sun; and then put them ſingly into Papers, and ſo into a Bag of Canvaſs, which muſt be hung up in an airy place that is dry, and in the ſhade. This way will keep them well in Strength, and defend them from Mice.

A reddiſh-colour'd ſandy Loam, well ſifted, is the beſt Soil for the Tulip, without any Mixture; for it keeps the Bulb ſound, and affords the Fibres an extraordinary Nouriſhment: but where Dung is much uſed, though it is three Years old, it rots the Fibres where-ever they touch it; and as the number of ſuch rotted Fibres happens to be more or leſs, ſo the Bloſſom will be weaker or ſtronger, and moreover the Root for the following Year will be weaker. So again, where any Compoſt is made for Tulips, if it is not well mix'd, ſo that all the Parts are, as it were, incorporated, it will diſtribute its Nouriſhment unequally, and harbour Canker-Worms in it, which will eat into the Bulb: but there is nothing better for a Tulip, than a freſh natural Soil; which is the beſt likewiſe for Anemonies and Ranuncula's.

Thoſe who would take the pains of raiſing Tulips from Seed, ſhould chuſe the Seed from ſuch Flowers as are tall, have large Bloſſoms, and ſtrong Stems, particularly with good Bottoms; and while they are in flower, mark them with Threads or Worſted, to expreſs the Colours the Flowers are of; and when the Seed is full ripe, break off the Heads or Seed-Pods, in a dry Day, when the Dew is quite gone from them.

While the Tulips are ſhooting for Bloom, nobody ought to touch either the Stem or the Flower-Bud with their Hands, leſt they ſhould bruiſe them; and when the Flower is perfect, then only one may open the Bloſſom with two little Sticks, very gently, but without bending the Stalk, leſt you bruiſe it, and thereby hinder the Nouriſhment that ſhould feed the Seed-Pod.

When the Seed is perfectly ripe, clean it from the Husks, and blow it while you toſs it; ſo will the full grown and perfect Seed fall to the bottom, and the light and unprofitable fly away.

The leaving on the Seed-Pods of Tulips till they are full ripe, helps to nouriſh the Bulbs; and, as a *French* Floweriſt obſerves, will keep the Bulbs from rotting or ſhrinking: For, *ſays he*, if we pull off the Stalk or Seed of the Tulip before the Seed is perfect, or the Stalk will eaſily part from the Root, we ſhall tear the Root, and the Root will ſhrink and be weak, or perhaps rot.

But to ſow Tulips, ſift a Bed of fine natural and freſh Soil in ſome part of your Garden, which lies the beſt expoſed to the Sun; when the Bed is prepared, and the Earth flatted a little with a Spade, ſow your Tulip Seed, (not too thick) upon the Bed, and cover it with fine Earth about the thickneſs of a Shilling, flatting it with a Spade as before.

The time of ſowing is the beginning of *October*, and the Bed muſt be new made the ſame Day we ſow the Seed.

The following Spring the Seed will come up, appearing then like young Onions, and muſt then be kept very clean from Weeds, not ſuffering any of them to appear, if poſſible, above the firſt Leaf, neither then, nor during the Winter; for if the Weeds grow, they will ſmother the young Tulips: and if we pull up the Weeds when they have made any Root in the Ground, they will bring out many of the tender Tulip-Bulbs along with them; which, at the firſt coming up, are ſo ſmall, as hardly to be diſtinguiſh'd, and will periſh if we even replant them preſently: for the Bulbs will not be larger than a Muſtard-Seed, and then one may eaſily imagine how ſmall the Fibres that feed them muſt be, ſo as to periſh with the leaſt Air or Bruiſe. For the Fibres of a Tulip are very brittle, and break with the leaſt Touch, as I find by ſhifting them from one Phyal to another, when it happens by accident that a Glaſs breaks by the Froſt or otherways.

The following Year, which is the ſecond after ſowing, in ſome fair Day in *July* take your Seedling Tulips out of the Ground, when you will find the Bulbs about the Bigneſs of Peas, ſome ſmaller, ſome larger, as you chance to find them ſhallower or deeper; for it is natural for a Tulip-Root to run downwards, and the ſtronger the Root is, the deeper it will run, as you will find by theſe Seedlings.

In the taking up theſe Roots, one ſhould do it with great Care, leſt any of them may be cut, or loſt; for one can't tell what a Treaſure may be loſt in a ſingle Root, conſidering how much a good Tulip has been valued.

But before we take theſe little Bulbs out of the Ground, prepare a Bed of fine-ſifted Earth of natural Soil, as before directed, to plant them in as ſoon as they are taken out of the Ground; for they are tender, and will preſently dry and ſhrink with the leaſt Air and Sun, which will hinder their Improvement. Set them about two Inches diſtance, and about half an Inch deep.

Two Years afterwards take them again out of the Ground about *July*, as before; but prepare firſt a good Bed for them, after the manner before related, and tranſplant them at greater Diſtances, obſerving, as I ſaid before, that in digging for them, you will find the larger Bulbs much deeper in the Earth than the ſmall ones; and ſome will run very deep, ſo that without great care you will loſe them.

When you take them up, you will find the larger Roots cover'd with a browniſh Skin, which will be hard as ſoon as it comes to the Air, and ſometimes this is very thick; but be it as it will, it ought to be pull'd quite off, till we diſcover the Bud of the Bulb from whence the Stem of the Flower or leading Leaves ſhould proceed. And ſo when we plant old Roots of Tulips, we ought to do the ſame by them, eſpecially thoſe which have miſs'd flowering a Year; for thoſe always drive deeper than ordinary, and will leave a very thick and coarſe Covering over them.

It is a good Rule to take every dry part which appears of a brown or black Colour, from each Tulip-Root before you plant it.

Be very careful in this Plantation of Seedling Tulips, to keep them clear of Weeds, and you may expect the fourth Year ſome of them will produce Flowers; and then 'tis adviſable to draw out ſuch as bring red Colours or Yellows, and fling them away, for they will never break to be fine Flowers. In the mean time, ſave ſuch as are of a Grideline Colour, of a Purple, and of a Fleſh-Colour; as alſo ſuch as have Bloſſoms of the

Colour of a Peach-Bloſſom, or of a Violet, theſe will make excellent good Breeders; ſome of them may perhaps break the firſt Year of Blowing. But if you have plain Tulips of the Colours I mention, you need not deſpair, for they will break ſooner or later into Stripes. Thoſe of the plain Tulips which we ſave for Breeders, and to change into fine ſtriped Flowers; I ſay, thoſe whoſe Flowers have the thinneſt Leaves, will break the ſooneſt; and on the contrary, the very thick-leaved Flowers will be much the longeſt before they break into Stripes.

A great Floriſt of *Liſle* ſays, that to judge of the beſt Tulips for improving in Colours, we ſhould chuſe thoſe which have a ſmall quantity of White at the bottom bounded with Blue, and thoſe with blue Bottoms bounded with White, with ſuch Stamina's as are three or four of them Blue at the bottom of the Tulip.

The learned Philoſophers imagine that the Variegation of Tulips, and other Flowers, proceeds from ſome Weakneſs or Diſtemper; and many come into that Opinion.

If when you have a good Stock of Breeding-Tulips, you cannot have patience to wait their natural Courſe of breaking into Stripes, (for there is not any plain Tulip but will ſtripe one time or other) you may take the following Method, as it is practiſed in *Flanders* by the greateſt Artiſts.

Take the Plaiſter of old Walls, wherein there is a great deal of Lime, and powder it very fine; mix this with Drift-Sand, or ſuch Sand as is ſharp, and found on the Sea-ſhore: to this add of the Water that runs from a Dunghill or Jakes, that one may have an equal quantity of each, and mix theſe as well as poſſible, and put it over the Surface of the Bed, a little before you plant your breeding or plain Tulips, and 'twill make them break into fine Stripes to a wonder, as is related to me by a Gentleman of great Honour, who has proved it, as he obſerved, for five or ſix Years.

Or as my Friend, who related firſt this Method to me, obſerves, ſome will put of this Mixture under the Roots of the Flowers; but he would have us avoid that, for 'tis, as he obſerves, too hot for the Roots.

Another Method for breaking of Tulips, which is leſs noiſome than the former, is to take ſlack'd Lime reduced to fine Powder, and Pigeons Dung, of each equal quantities, well mix'd together, and ſprinkle it upon the Bed, as the former was directed. Others uſe Hens Dung in the ſame way; and ſome of leſſer Underſtanding have laid Colours of ſeveral kinds on their Beds of Tulips, and even mix'd the Colours with the Earth their Roots were planted in; but the latter ſort never received the Advantage they expected from their Experiment.

When you happen to have a Collection of ſuch Tulips as are remarkably fine, and you may chance to find that ſome of them will not flower ſo fine one Year as another, they ought not to be flung aſide for all that, for they will at another Seaſon return to their full beauty and perfection; therefore have patience with them, for many ſorts of Tulips are ſubject to ſuch Changes. One might name many Particulars, but, in a word, there are not above half a ſcore ſorts that come exactly alike two Years together; you will find more white this Year, and more dark-colour next Year: and when you ſee any of the fine Tulips abound in white, and finely ſtreak'd with the blue and red, you may depend almoſt upon having them dark-colour'd the Year following; but whatever you ſee dark-colour'd this Year, be ſure they will come fine the next, if they are Flowers of a true kind. And was I to chuſe a Parcel out of a Bed of Tulips, where I could be ſure of the ſorts, I ſhould mark thoſe of ſuch ſorts which I found did come the leaſt fine, that I might expect a fine Bloom the Year following. And it is certainly good in Reaſon, from what has been explain'd fully of the diviſion of Colours by the annual alteration of the Roots, as a Gentleman of the Royal Society has ſet it forth four or five Years ago. On this footing we find that the old Tulip call'd *Vulcan*, and another as old, call'd the *Roramonblu*, are remarkable; they will look one Year deſpiſable, and the next will appear in the greateſt Beauties one can expect.

I ſhould add, with reſpect to the raiſing of Tulips from Seed, that ſome will blow the fourth Year; that is, the larger Roots will blow then, and ſo the reſt in their degrees will follow, till the ſixth or ſeventh Year. But if we ſow every Year, we may have a continued Bloom of new ſorts; and I ſee no reaſon why any one ſhould diſcourage himſelf from beginning ſuch a Seminary, becauſe of the length of time; when we find every one has Courage enough to plant a Fruit-tree, which, againſt a Wall, according to the common practice, will not bear till the third Year: For whether it is Fruit or Flower that we ſow or plant, 'tis with the ſame expectation of receiving Pleaſure from it, and we muſt wait our time to enjoy it.

But to return to the raiſing of Tulips from Seed: I have heard from ſeveral Gentlemen who have been Eye-witneſſes of it, that *Samuel Trowell* Eſq; of the *Temple*, has, in one of his Gardens, raiſed ſome Tulips from the Seed of that which is call'd the *Triumph of Europe*; which is a Flower Purple and White, finely mark'd, and one of the moſt conſtant in its Marks and Colours of any Tulip. In this, as to its conſtancy of flowering well, it is ſeemingly owing to its purple Stripes being on the outſide. As the ſtriped Plants which have the White on the outſides of their Leaves, or on the Verges of them, never run from their Colours; ſo from the *Triumph of Europe* he choſe the Seed: and when the firſt of his Seedlings blow'd, he found very few plain Flowers among them, and even thoſe were of hopeful Colours to refine themſelves the Year following, as many of them happen'd to do, and from Year to Year produced great variety of fine Sorts.

Another Gentleman of my Acquaintance ſaved the Seeds of the *Baget primo*, a notable tall Flower, of a purpliſh Colour, and well made, but plain; from which many a valuable Flower has been broke into Colours, or brought to ſtripe, even ſo valuable, as to be ſold for a Thouſand Guilders, *Dutch* Money, one of them.

This Flower he choſe for his foundation, and the firſt Year's Bloſſom he had none but plain Flowers; but the ſecond Year's flowering of them, ſeveral began to break into Stripes, which were extremely good, and much eſteemed by the Curious. And what is remarkable, the ſame Seed produced Flowers of ſeveral Makes and different Colours when they firſt open'd, and then ſome few came fine of them, with Stripes. But according to the Philoſophy of our Times, with regard to the Generation of Plants by coupling with one another, it might probably happen from that Cauſe, that the ſeveral Seedlings were ſo diverſify'd.

I wiſh ſome curious Gentlemen would try the Parrot-Tulips the next Year, by planting the yellow and the red ſorts together, and ſave the Seeds from them, and ſow them; or if theſe were placed among other Tulips of different ſorts, it might be better to produce more Varieties from the Seeds, according to the Doctrine of the Generation of Plants: I ſay, theſe Couplings might bring a number of Rarities, if a little Care was taken to put them forward.

The Manner of Raiſing the Ranunculus *from Seed.*

THE Ranunculus is certainly one of the moſt ſporting Flowers in the Garden: about *Perſia* and *Turkey* they grow wild, as I am inform'd, in vaſt Numbers, and extraordinary Varieties. We have from thoſe Places received the firſt that were in *England*, and have now improved them to a very great degree, inſomuch, that they make one of the fineſt Appearances in our Gardens. There is nothing more dazling than a Bed of the double Red ſort, nor more ſurprizing than a Bed of the variegated Kind.

The Plants or Roots will increaſe plentifully if they have the Benefit of light Earth, eſpecially ſuch as is taken out of a Wood, which chiefly is made up of rotted Leaves and Sticks. They are Lovers of Moiſture when they have once began to make Fibres, and ſhould have a good ſhare of Sun till they begin to blow, and then ſhould be ſhaded from the Violence of it in the hotter time of the Day, which will keep them flowering a long while, if we water them frequently; but in the Waterings, great Care muſt be taken not to wet the Flowers, and indeed as few of the Leaves as poſſible. The Watering-pot ought therefore to have a long and narrow Spout, without a Roſe to it; and if they are kept in this manner, they will bloſſom for ten Weeks together, and bring great quantity of good Seed; I mean the ſtriped ſorts, which are call'd the *Perſian* Ranunculus's; and ſome of them, with good Management, will blow two Foot and a half high.

'Tis the Semi-doubles of this Ranunculus that produce the beſt Seed for ſowing, tho' there are ſome of the ſingle ones which yield ſuch beautiful Flowers, that Seed ſaved from them has brought very extraordinary Plants.

When one has got a Stock once of theſe ſorts that are good, and one has a good Seaſon to ſave the Seed from them, that is, a dry time to ripen it well, we may preſently ly enlarge our Numbers, and produce new Varieties every Year.

When we gather Seed, it ought to be very dry, without any Dews upon it, the Noon-time of the Day is the beſt; and cut the Heads of Seed off with a pair of Sciſſars, and ſpread them on Sheets of Paper, in a dry Room, where the Sun cannot ſhine upon them.

The *Auguſt* following you muſt ſtrip the Seed, which is ſcaly, from the Stalk, and ſow it upon a Bed of freſh Earth, finely ſifted, and preſs'd a little with a Spade. Sow the Seeds about half an Inch aſunder, which, if they ſhould all come up, they will ſtand at diſtance enough for their firſt Years flowering. When the Seed is ſown, if you have any rotted Wood, or rotted Leaves quite turn'd to Earth, or any Tanner's Bark which has loſt its heat, and has lain long enough to be mellow, then ſprinkle over the Bed ſome of ſuch Earth finely ſifted, covering the Seeds about the thickneſs of Half a Crown; and in *September* they will come up, and will bloſſom the next Year, if you can defend them from the Winter. But becauſe there is a Hazard to be run, if a long Froſt ſhould happen, many of my Acquaintance choſe to ſow them in Pots; becauſe, when thoſe in Pots come up before the Winter, they may be ſet into a Green-houſe, or ſome other Place of Shelter, if any hard Weather ſhould happen; and ſome of theſe will bloſſom the Summer following, and one or other of them ſhew their Flowers till the middle of *July*.

When they flower, tie a String of the Colour of the Flower about the Stalks of ſuch as are good; and for the others, which are indifferent, pull them up as ſoon as they ſhew their Flowers, which will make room for the good ſorts to enlarge their Roots; and when their Leaves are quite dry, take up the Roots, and waſhing them well, dry them two or three Hours in the Sun, and lay them by in a dry Place till *September* or *October* following, and then plant them about five Inches aſunder, in a Bed prepared of ſuch Earth as I have mentioned above. But if you keep them out of the Ground till *March* or *April* following, they will grow and bloſſom about the end of *May*, or in *June*.

But it is alſo practiſed by many to ſow the Seeds of Ranunculus in *February* and *March*; and then they eſcape all the danger of the Winter Froſts, and come very well to get ſtrong Roots before the following Winter.

A Gentleman who has abundance of this ſort of Flower in *France*, ſays, that the beſt way to keep Ranunculus Seed good till the Spring next after 'tis ripe, is, to bake ſome fine Sand, chiefly of the white ſort; and when it is quite dry, like Sand as is uſed in Writing, let the little Cones of Ranuncula

Seed be ſtripp'd from the Stalk, and mix the Seed with the Sand; and then put it in a dry Box, and keep it in a dry Room till *February* or *March*, that you intend to ſow it. This Way, he ſays, will preſerve the Seed in good heart; for as it is thin and light, part of it may decay without ſuch help.

As for the Ranunculus Roots, I find they grow very well without Earth amongſt my other bulbous Roots, which I have in Bottles of Liquid: And ſo likewiſe does the *Anemone*; and indeed I don't know any bulbous-rooted or ſuch like Plant that will not, whether *Snow-drop*, *Crocus*, *Ornithogelum*, *Bulbous-Iris*, *Junquil*, *Daffadils*, *Narciſſus* of any ſort, *Crown-Imperial*, *Tuberoſe*, *Hyacinth*, *Tulip*, *Colchicum*, and *Cyclamen*.

Some Remarks concerning the Anemone.

THE *Anemone* is a Flower ſo well known, that I ſhall ſay little more of its Character, but that it is next to a Ranunculus beautiful: And as for the Culture of it, every Book of Gardening takes notice how to manage it. What I ſhall mention of it, will be only what either the Writers about that Flower have forgot to mention, or elſe has not fallen into their Way of Practice.

As firſt, this Root, as I have been inform'd by a Perſon of great Veracity, may be kept out of the Ground three Years, and will yet grow. The ſame Gentleman tells me, that upon the Death of a Relation, who was a Lover of Flowers, there happen'd a Law-Suit, which prevented the Heir of poſſeſſing the principal Part of his Fortune for above two Years; and that when he came to the Enjoyment of it, he found a Box of choice Bulbs, and ſuch like Roots, which were moſt of them dry'd to almoſt nothing, except only ſome *Anemone* Roots that were ſound and hard. Theſe my Friend deſired to make an Experiment with, and they were planted the following Autumn, and grew very well; which ſo ſurpriz'd him, that he thought fitting to acquaint me of it.

Another Hint which may be proper to give the Curious concerning the *Anemone*, is, that when we take up the Roots, and they are well waſh'd, we ſhould, with a fine Knife, cut off all the rotten Parts that we can find in each Root, quite to the Quick, and then let them dry in the Sun for a day or two, and keep them afterwards in a dry Room, till we think proper to replant them; then give them another Examination, and take away whatever Rottenneſs you did not cure by the firſt cutting; and, at the ſame time, break off the Claws for encreaſe: and when they are well dry'd, put the Roots in the Ground, ſo that their Buds may be cover'd an Inch at moſt. The Earth for theſe ſhould be pure Sandy Loam, of the reddiſh ſort.

N. B. Without trimming the Roots, as above directed, they will rot.

We may note likewiſe of the *Anemone*, that one may have a Bloom of it every Month in the Year, by planting the Roots in every Month, when the Ground is not frozen: However, if in *November*, *December*, or *January* there happen hard Froſts, one may plant ſome in Pots, and give them the Shelter of ſome Green-houſe or other, where the Sun may come at them now and then. Or to bloſſom at that Seaſon, plant ſome in Pots in *Auguſt*, *September*, or *October*; and when the Weather grows harſh, let them have the Benefit of a Green-houſe, or warm Room, and they will bloſſom very well: the ſingle ones eſpecially, for the double ones require a Heat extraordinary to open their Thrum, which is commonly much crowded with Leaves. So that when we raiſe a Bed of Seedling *Anemones*, we ſhould ſave the Singles of the beſt Colours to plant for Winter Blowers. Here particularly the Method of raiſing 'em in Glaſſes of Liquor is advantageous; for there is no Dirt proceeds from them, as may happen from Pots, and one may ſet them in the niceſt Chamber; and as the Room happens to be warmer than ordinary, they will blow the ſooner: but they muſt have Air ſometimes, to make their Flowers carry the better Colour.

To raiſe this Flower from Seed, one ſhould have a parcel of good ſingle *Anemones*, of good Colours, and well mark'd; and when the Seed-Thrum is ripe, and fit for gathering, it will begin to crack, and ſhew a ſort of a Down or Cotton-like Subſtance: and immediately when you eſpy this, gather the Seed, for elſe in an Hour, if there is the leaſt Air ſtirring, it will be all diſengaged from the Stalk, and blown away. In a fine Morning about ten a-clock, you will find ſuch Thrums of Seed as are ripe begin to crack; and then cut them and part of the Stalk with a Pair of Sciſſars, and keep them in a warm place till they are quite open'd, and then rub them in very dry Sand, and lay them by till the End of *Auguſt* in a dry Place: at which time you may ſow them on ſuch a Bed as directed before for Ranunculus Seeds, and cover the Seed with fine ſifted Sandy Loam, about the thickneſs of half a Crown.

It is alſo common to ſow this Seed in the ſame manner in *February*, rubbing the Seed and the Sand together gently as you ſow it. It will ſprout in about three Weeks after ſowing, and the Bulbs will be about the bigneſs of Peas the ſame Year, but ſome larger, and will bloſſom the Year following.

Of other Bulbs *from Seed.*

GReat Varieties have been produced from Seeds of other Bulbs, as from the *Hyacinth*, by gathering the Seed when 'tis full ripe, and rubbing it out when 'tis quite dry, and then ſow it in the End of *July*, in a Bed or Caſe of fine natural Earth: and this Seed may be covered the thickneſs of a Crown-Piece, or ſomewhat more. This will come up the ſame Year, and muſt be taken up the Year following as ſoon as the Leaves or Spires periſh; and then immediately, as the young Bulbs are taken out of the Ground, replant them in a Bed of the ſame Earth at about three Inches diſtance, and to be cover'd with Earth about the thickneſs of two Crown-Pieces; and in that Bed they may remain two Years, obſerving that in all theſe Seminaries every Weed, as ſoon as it appears, muſt be plucked up; for elſe, if they get a head, they will ſmother many of the young Plants, and becoming large, will tear up the young Roots when ſuch Weeds are drawn out of the Ground.

When theſe have ſhewn themſelves three Years, and the Leaf is decay'd the third time, take them out of the Ground, and plant them directly into a freſh Bed of good light ſandy Loam, or ſuch as we may gather from the Surface of Woods, or Groves of Trees, being well ſifted; and as you will find ſome of them begin to ſhew little Off-ſets, let them remain at the Roots without any diſturbance, for two Reaſons: one is, that it would wound the young Root too much to take them off, and the other is, that if ſuch a Root ſhould bring a good Flower, you will want the Off-ſets for Encreaſe, which would now be fit to ſeparate from the mother Root.

Theſe Flowers, let them be ever ſo ſtrong, or large in their Bulbs, love the leaſt to be long out of the Ground, but may be nevertheleſs taken up about *July*; and when the Off-ſets are taken away, the Roots, as well as the Off-ſets ſhould be replanted in *Auguſt*, preparing the Beds of fine ſifted Earth very deep, for the Roots which ſhoot from the Bottoms of the Bulbs, are large, and chuſe to ſhoot downright, as one may obſerve in thoſe Hyacinths growing in the Glaſſes, where every bulbous-rooted Plant ſhews us the true manner of its Growth.

It is to be noted, that in mixt Earths, that are not well incorporated; if we plant the Bulbs of Hyacinths where any of the large Fibres happen to touch any Dung which is not perfectly conſumed, ſuch Fibres will rot, and then 'tis ten to one, but that rottenneſs will reach the Heart of the Plant: I have taken up many Hyacinth Roots at different times, to obſerve their Progreſs, and as ſurely as they meet with unconſumed Dung, the large Fibres will there be rotten; and as they are the Leaders of Nouriſhment to the Bulb, the loſs of every ſuch Leader is ſo much loſs of ſtrength to the Plant: a great many good Floweriſts have ſuſtained great loſſes by this Root for want of making this Obſervation.

Of the Narciſſus.

WE have already great varieties of this Flower, which are much eſteemed for their fine Colours and ſweet Scent; but if any would ſow the Seed of them, we might greatly enlarge that Tribe of Plants, and exalt that Plant to as high a pitch of Reputation as any other. Their Colours are of White, Yellow, and Orange, and there is a chance that one might get a Red or a Blue from Seed; they ſhould be ſown as ſoon as the Seed is ripe, after the Manner, as directed for the Tulip: which is all I have to ſay of this Flower extraordinary; the manner of its Culture may be ſeen in other Books.

Of the Crocus.

THE Crocus may be alſo raiſed from Seed, and brings extraordinary Varieties, as well in their Colours and Shape, as in the Times of their Blowing. I have ſeen ſome ſurpriſing Sorts that have been Sold for two or three Shillings a Root; and ſome Gentlemen of my Acquaintance have followed ſo much this taſte of raiſing Flowers of this kind from Seed, that they have, as it were, a new Creation every Year in their Gardens.

The Seed of the Crocus is found near the Root of the Flower; which I mention, becauſe I believe few have obſerv'd it, at leaſt, 'tis not mention'd in any Book I have read. We may find it ripe about the end of *April*, or in *May*, if we do not cut off the Tops of the Crocus-Plants when they have done blowing, as is the Cuſtom; for tho' we do not cut away the Seed, by thus trimming the Plants, yet we cut away ſuch parts of the Plant as are neceſſary to nouriſh and preſerve the Seed, till it is full grown and ripen'd.

When the Seed is gather'd, ſow it in three or four days time at moſt, for it will not keep longer, as a curious Friend informs me, without the hazard of Rotting. The beſt way is to ſow it upon a Bed under a Wall, expoſed to the riſing Sun; the Earth muſt be light and fine, and the Seed may be covered the Thickneſs of two Crown-pieces; they will bloſſom in a few Years, and as I obſerv'd above, will produce as many Varieties as any other Flower; and as it comes early, makes a graceful Shew in a Garden; and, while I am ſpeaking of this early Spring-Flower, I cannot help taking notice of the

Improvement might be made, by ſowing the Seeds of the Hepatica, which, tho' it is not a bulbous-rooted Plant, yet as it bloſſoms at the ſame time with the Crocus, and has been diverſified by Seed, as I am inform'd, by a *French* Gentleman; ſo I think it the beſt place of my Book to inſert his account of raiſing it from Seed.

Part of a Letter, concerning the raiſing of the Hepatica *from Seed.*

' THERE are divers ſorts of Hepatica's, ' as the White, the Blue, and the ' Bluſh or Peach-bloom Colour; of theſe, ' there are the Single, and the Double; but ' 'tis the Single that is only uſeful to raiſe ' Plants from by Seeds; theſe flower in ' *January*, if the Winter has been favour- ' able, but are conſtantly found in Bloſſom ' in *February* and *March*, and then give a ' very great ornament to a Garden: and ' when the Flowers decay, the Seed-Pods ' grow, and ripen as freely as any other ' Flower; but one ſhould be careful to ' watch them, as they ripen, about the Be- ' ginning of *May*, or they will ſoon be ' loſt.

' As ſoon as they are gather'd, they ſhould ' be ſown, for they bring a ſmall Seed, and ' therefore 'tis not adviſable to keep them ' long out of the Ground.

‘ To make a Seminary of them, have large ‘ Pots or Pans, about ten Inches deep, and ‘ a Foot or fourteen Inches over; fill theſe ‘ with a black ſandy Soil, ſuch as one gets ‘ from Heaths, and well mixt, with an equal ‘ quantity of rich Garden-Soil. When the ‘ Earth is gently preſt down, ſow the Seed, ‘ and ſprinkle over the Seed as much of the ‘ ſame Earth, as when it is preſt down, will ‘ cover it, the thickneſs of Half a Crown, ‘ then water it well, with a ſmall Watering-‘ pot, and a fine Roſe at the end of the Spout ‘ to keep the Earth from waſhing, and cover ‘ the Pans over with Nets, to keep the Birds ‘ from the Seed ; for ſmall as it is, they will ‘ have it, if poſſible: and this being done, ‘ ſet the Pans under a Wall, expoſed to an ‘ Eaſt Aſpect, till *June* is paſt, and then ſet ‘ them under a North-wall, for they love ‘ ſhade.

‘ When theſe Plants have two or three ‘ Leaves a-piece, they may be tranſplanted ‘ in a Bed of fine Earth, of the Sort before ‘ mention’d ; but it muſt be done by a very ‘ careful hand, for the Roots being very ‘ ſmall, ſhould not be bruis’d by any means: ‘ and then, if the Plants are not replanted ‘ as ſoon as they are taken up, the Fibres ‘ will be endanger’d of drying by the Air, ‘ and then the Plant runs the hazard of ‘ being loſt.

‘ When you tranſplant theſe Seedlings, ſet ‘ them ſix Inches diſtance, and water them ‘ very well, and ſhade them for a Week or ‘ ten Days.

‘ From an hundred of ſuch Seedling-Plants, ‘ I rais’d above twenty Sorts, different from ‘ what I had before; and if you will try it, ‘ or any of your Friends, you will certainly ‘ find your account in it.

‘ But I muſt obſerve to you, that a Gentleman in my Neighbourhood has kept the ‘ Seeds of Hepatica in fine dry ſandy Earth ‘ till the *January* after he gather’d it, and ‘ then ſow’d it with the Sand; and he tells ‘ me, that they come up very well. But ‘ when I ſay that theſe Seeds ſhould be ſown ‘ ſoon after they are gather’d, it is from my ‘ Experience that I did ſo, and they did ‘ well; but my Friend obſerves, that he ſet ‘ his Pots under a South-wall till *March* was ‘ over, and ſo ſhifted them to another quarter, where they had leſs Sun, and ſo had ‘ a good Crop. This is all that I have to ‘ inform you of concerning the raiſing of the ‘ Hepatica from Seed, and am

Mr. COWELL’s

Humble Servant,

PAUL CHANEAU.

As my Correſpondent is at preſent ſettled in *Normandy* in *France*, and has promiſed me ſome Roots of the Hepatica of his raiſing, which I daily expect, I hope to ſee ſomething very fine among them; but 'tis remarkable, that the firſt he raiſed from Seed, was in *England*, and tells me he has therefore given me Directions accordingly.

Of raiſing the Bulbous-Iris *from Seed.*

AS I have made it a rule to treat of nothing in this Book but Novelties, and ſpeak only of ſuch things as the Authors I have read, have not mention'd; ſo I ſhall ſay little more of the Characters of the Plants I ſhall here introduce, but juſt what is neceſſary to explain what the Plants are that I write about, except delivering the Obſervations I have made of their extraordinary Improvement.

The Bulbous-Iris is of the Flower-de-Luce Kind, and has abundance of various ſorts and Colours; what I ſhall ſay of it particularly, is to give the Method of raiſing it from Seed.

We muſt let the Seed be very ripe, and in a dry Day gather it, and let it remain in the Pods for a few days in a dry Place, before we clean out the Seed: When we ſow it, which ſhould be in *July*, let it be ſow'd after the Manner of the Seeds of Hyacinths, and managed like them, by tranſplanting from time to time, till they blow. There was a moſt ſurpriſing Appearance of theſe Plants once raiſed from Seed, at Mr. *Francis Hunt*'s, at *Putney*, in *Surrey*, which were wonderfully eſteemed by all who ſaw them, ſome of them being marbled with White and Crimſon, and others ſpotted with the ſame Colours; and, again, others marbled with Yellow, Blue, and White, and ſtreak'd like the Rainbow.

Of raiſing the Fritilaria *from Seed.*

THE Fritilary, or chequer'd Daffodil, as ſome call it, is a Flower well known to the Gardeners, but the Varieties of it are very ſcarce and uncommon; we have about twenty ſorts from *Holland,* of extraordinary Shapes, and odd Colours: and as ſome of the curious Gentlemen, who are Lovers of Gardening, have begun the raiſing of them from Seed with us; it is to be believ'd, we ſhall ſee as great Curioſities from their attempts, as from thoſe raiſed in Foreign Countries; and now we have already ſuch a variety, one may more ſurely expect many more Curioſities of that kind, when they come to blow, that the Gentlemen of my Acquaintance have ſown, and from the Seed, one may ſow from this year's Flowers.

The Seed will ſhew itſelf ripe when the Husks, wherein 'tis included, change of a yellowiſh Colour, grow dry, and crack; then one may gather it about Noon, in a warm dry Day, and keep it till *July*, and then ſow it, as is recommended for Hyacinths: you will ſoon find a diverſity in the Leaves of the Seedling-Plants, and when they come to flower, much more ſurpriſing Appearances.

The Soil this Root likes beſt, is a light ſandy Ground, and eſpecially ſuch as comes from Heaths, mixt well, with ſome freſh Earth from under the Turf.

Of raiſing the Martagon *from Seed.*

I Have never yet heard of any one who has attempted to raiſe Martagons from Seed, but a *Dutchman*; and I am credibly inform'd, that he has had ſome Succeſs in it: there are many Sorts of them which yield variety of Colours, and as ſeveral blow together, one would ſurely ſave the Seeds of them to expect more different Kinds. If the *Virginia* Martagon would flower with ſome of the reſt, one would be apt to judge, that the Seed ſaved from that, would produce ſomething very extraordinary; but one would try all the Sorts, for out of each, might come ſomething ſurpriſing, and then the Sower would reap the Reward of his

Labour; even, if there was only one different from what had been before, it would be worth his while, whether he ſold it, or kept it, as a Rarity for his own Garden.

The Famous Lilly, variegated with Red, or Purple, and White in its Bloſſoms, was raiſed from Seed in *Flanders*, though we firſt had it from *Holland:* and why may we not expect ſomething as extraordinary from the Seed of the Martagons, which are more ſporting Flowers than the Lilly?

A Gentleman, who comes from *Amſterdam*, ſays, that he has try'd already that the Seed of the Martagon will grow, and if it will do ſo much, there is no doubt but it will do all the reſt: he only gather'd the Seed when he found it full ripe, and ſow'd it in the firſt Pot he came to, only he took ſome freſh Earth that had been brought for his Garden, and it came up ſoon enough, and ſtrong enough to know what it was; but what the Flowers will be, he waits with impatience to know: from this, any curious Perſon may take Knowledge enough to try the Experiment.

Of the Crown-Imperial, *the Manner of raiſing it by Seed.*

WE have eight or nine Sorts of this Flower, ſome with ſingle Crowns, ſome Double, and others Triple; and they for the moſt part appear about the ſame time in the Spring. I find, that ſome Gentlemen of *Flanders* have raiſed ſeveral Varieties from the Seeds of this Plant, and therefore I doubt not but our Vertuoſo's in Gardening, will, when they are put in mind of raiſing the Crown-Imperial from Seed, begin upon that work; for the Seedling-Plants will certainly produce ſomething new to us.

It is not a little ſurpriſing to obſerve, that the Flower of the Crown-Imperial hangs down; and when the Seed is ſet, it grows upright: the Learned, I underſtand, have had many diſputes about it, chiefly, thoſe who have writ for and againſt the Generation of Plants. But be it as it will, we find the Seeds ripen in large Caſes, and they are without diſpute as free to grow as any Seed, for they are as perfect; and therefore, according to the Advice I have from the Gentleman who firſt told me of raiſing them by Seeds, they muſt be kept till *Auguſt*; after you have dry'd them eaſily, and then ſow'd in Pots of fine freſh Earth, ſifted, and cover'd with the ſame a quarter of an Inch thick.

They will not appear, he tells me, till the Spring following; and after their Leaves decay, take their Roots out of the Pots, and replant them preſently into a well-prepared Bed, at five or ſix Inches diſtance, and ſo let them ſtand till they flower; and perhaps one may find among them a Flower that may be extolled, as much as the Purple and White Lilly. The manner of treating them when they come once to flower, may be ſeen in moſt of the Books of Gardening, and therefore I ſhall ſay nothing of it in this Place.

One might ſtill give ſome account of the raiſing of Auricula's, Polyanthes, and Carnations from Seed; but we have that throughly ſet forth already; and what I mean here, is to produce nothing but Novelties, and ſo ſhall proceed to lay down ſome particular Remarks of the Culture of Roſes.

Particular Memorandums concerning the Management of Roſe-Trees.

THE Roſe-Tree, for the moſt part, in all its Sorts, loves Moiſture; the chief Sorts, are, the Damask, the Provence, of two Sorts, (that is) the Red, and the common Sort; the Velvet-Roſe, the White-Roſe of ſeveral Sorts; the Carnation-Roſe, the two ſorts of ſtriped Roſes, *viz.* that which is call'd the *York* and *Lancaſter*-Roſe, and another, which is call'd the *Roſamundi*; the Musk-Roſe, the *Holland*'s-Roſe, or *Belgick*-Roſe, and the Double Yellow-Roſe, and the Cinnamon-Roſe. There are many more Sorts which are Semi-double, of little eſteem, and of the ſingle Sorts: the moſt beautiful, is, what is call'd the *Auſtrian*-Roſe, becauſe it has a yellowiſh Colour without ſide the Leaves, and Red within the Flower.

But of theſe Roſes, I have obſerved two Manners of Managements; thoſe which are the freeſt of Spines or Thorns, love Water, and the others, which are fuller of Thorns, may grow upon drier Grounds. And of the firſt Sort, one may take of the Damask, and the Monthly Roſes, and with a large piece of Cork, placed between the Root and the Branch, ſet them ſwimming in a Pond, and they will grow for a long time.

All theſe, and the other ſorts of Roſes, are improved, by graffing and budding, as the Jeſſamine; that is, graft them in the Clift in *March*, or about the Beginning of *April*, but the laſt is rather too late, if the Spring is forward, or elſe it is a good Seaſon. And to Bud them, or Inoculate them, take the time of their ſecond Shooting, and they will certainly bear the following Year.

The budded Plants will make cloſer Heads than the Graffed-Trees, but the Graffed-Trees will be more Luxuriant than thoſe that are budded.

It is neceſſary to obſerve, that the Roſe-Trees we graft upon, ſhould be agreeable to the Scion; (that is) the very prickly Sorts will more readily take upon thoſe of the ſame Kind, and the ſmoother ſorts of

Roſes, rather take upon Roſes of a ſmooth Kind, than upon any of the Eglantines or Sweet-Briar Sorts; but they will all take, if they are Graffed, or Budded, or Inarched upon one another, ſo that one might have variety of Roſes upon the ſame Tree.

The Eglantine, or Sweet-Briar, is as proper a Stock for a Roſe to be graffed upon, as a Quince, a Pear-Stock, or a Haw-thorn to graff a Pear upon: only, as I ſay above, one will bring Fruit ſooner, and make a ſmall Tree, and the other will grow Vigorouſly, and be longer before it comes to bearing.

All Roſes without Spines, you may obſerve, grow ſhorter or nearer the Ground than thoſe which are full of Spines; but yet they ſo well agree with one another, that each may be graffed on one another, or budded, particularly the ſhort upon the Damask, to laſt long.

Again, the Dwarfs may be cut down every Year after bearing, and the next Year will bear plentifully.

Every Roſe-Tree, of the more thorney Sorts, whenever they produce a full-blown Flower, cut the Flower as ſoon as you ſee it open, down to the ſecond or third Bud of the Branch, and it will preſently produce freſh Shoots, with new Buds of Flowers upon them: this was the way the Famous Mr. *Millet*, of *North-End*, practiſed, to have

Roſes all the Winter, and I have found to be right.

The Double Yellow-Roſe is hard to blow; and ſome curious Gentlemen have attempted it, without Succeſs, by nailing it againſt a Wall, but in the open Ground it will do very well, if you cut it down within a Foot of the Ground every Summer after its blowing Seaſon, or make an artificial Shelter to put over it in wet Weather; for this Roſe will never open well, if wet comes upon it while it is in bud; it loves a full Sun, and an open Air, as there is an Inſtance of one of theſe Roſes at *Twickenham*, in a Garden, near Mr. *Heather's*, an excellent Floriſt, and polite Gentleman, famous for Gardening; I think it is in the Counteſs of *Weſtmorland's* Garden.

CHAP. IV.

Extraordinary Obſervations concerning the Management and Pruning of Fruit-Trees.

AFTER thirty Years Practice, in the ſeveral Branches of Gardening, I have made a great Number of Obſervations, with regard to the Culture and Management of Fruit-Trees, as well as of Flowers, Exotic-Plants, Improvement of Lands, and whatever elſe fell in the way of my Buſineſs, as a Gardener: and as I am deſired to put together ſuch Memorandums as I have collected from my Practice; I ſhall here give a view of ſuch Particulars as are neceſſary for every Lover of Fruit to underſtand.

We train up Fruit-Trees in four different Manners, *viz.* Standards, Half-Standards, Dwarfs, and then again for Walls: I ſhall at the ſame time let my Reader know, that what we call Standards in a Nurſery, are ſuch as have high Stems, and have Heads graffed or budded upon them; ſo that they may be either planted in the open Ground, or placed againſt Walls, to fill the Tops of the Walls where the ſmaller Trees cannot reach.

The Half-Standards are budded or graffed upon lower Stocks, perhaps the Stem not above two or three Foot high, and then generally are ſet in Beds by way of Ornament, which ſome prefer before Dwarfs. Now and then indeed they are placed againſt Walls, to fill a Vacancy where a Tree has fail'd in ſome of its Parts; for a Wall ſhould never be empty, if one can preſerve it full: which one way or other by Standards, or Half-Standards, may be always cover'd, and being well planted, will bear Fruit the ſame Year, or the ſecond Year never fails. Gentlemen have often complain'd for want of this Knowledge; and as every Nurſery-man has not fallen into the way of providing ſuch Trees, I would adviſe thoſe that have been deficient in this Thought, to provide for ſuch Things as their Art leads them; for Trees well managed may be removed in their ſecond and third Year after Graffing with great eaſe, and will bear the ſame Year, as Experience confirms in Plumbs, Peaches, Nectarines, Apricots, and other ſuch like Fruits. There was indeed a Way we had formerly of cutting down every Tree we planted within a little of the Bud; but then we waited till the third Year before we had any Fruit from it: but now we plant the Standard and Half-Standards with their Heads on, when they are in a bearing State, and the ſame Year they bring us good Fruit.

There is only this to be conſider'd at the Time of Planting, that as the Roots of the Trees are broken at the Removal, we ought to have a Regard to what is loſt in the Roots a little before the Trees ſhoot in their Branches, and prune off a proportionable Quantity of them, to equal, as near as can be, what has been taken from the Roots.

Dwarfs are expreſs'd in the Nurſery, to be ſuch as are ſhort and fit to begin and end their Growth in a little Space: but to explain that Character a little more, they are ſuch Plants as are budded or graffed near the Ground, to be ſet againſt Walls, to fill the Bottoms of the Walls with Fruits, and by gentle degrees, fill the Walls, if they are not of an extraordinary height; and alſo to plant in Beds, that they may be kept in narrow Compaſs and ſhort Bounds.

If the Dwarf of the firſt Year's Growth is planted againſt a Wall, it muſt be always planted with the whole *Bud-ſhoot* without Cutting, and when it begins to ſwell its Buds, cut it down to ſuch a convenient order, that every Bud may make a Shoot which may the moſt naturally grace the Wall, to be laid horizontally, ſo that the lower Shoot be nailed parallel with the Bed it grows in; then will your Tree from the very Bottom bring Fruit: which part of the Wall is often loſt, by leading the Shoots of Fruit-Trees upright.

Dwarfs planted in Borders, have been heretofore much in faſhion, to be train'd in the Manner of Baſons or Bowls, and led to that figure by Hoops; but as their Shape was conſtantly to be kept regular, ſo there were but few Gardeners could keep them in a beautiful Order, and make them bring a good Quantity of Fruit at the ſame time: for if their Shape was nicely kept, great part of the bearing Branches muſt neceſſarily be cut off; and for that Reaſon, there are few Dwarf-Trees found now in any Garden, except they are ſuch as are graffed upon Paradiſe-Stocks for Apples, and upon Quince-Stocks for Pears, which may be always kept in a very narrow Compaſs. But for thoſe upon Free-Stocks, they run or ſpread to too great a Size; and, beſides, the overſhading the Beds where they grow, they ſpread over the Walks, ſo that the Walks are reduced every Year by them: for which Reaſon moſt of the old Dwarf-Trees have been reduced and laid into Eſpaliers, and by that means make an handſome Show, bear plenty of good Fruit, give Air and Sun to the Beds where they grow, and are very graceful to the Walks; firſt, in their Bloom, and then in their Fruit.

When we have old Dwarfs to manage thus, the great Quantity of Wood which we muſt neceſſarily take away, will give the Trees an extraordinary Luxuriance in their

Shoot, and ſubject them to run into Wood-Branches of great Strength, if we do not obſerve to take into the Eſpalier as many of the Shoots of the laſt Year as one can get. But in this Work one ſhall find ſometimes more, ſometimes leſs of them; and the more we can lay in conveniently, the leſs ſhould we prune the Roots: and ſo on the other hand, where we can bring in but few young Shoots to our Eſpaliers, we ought to take away a proportionable Quantity of the large Roots.

But, again, in this Work, we ought to lay down ſome Shoots on each ſide the Root, to run as near the Earth as poſſible, that the Eſpalier may be full from the Bottom; and to do this, it will be ſometimes neceſſary to give ſome of the large Branches an Half-Cut to bend them down, and bring them to the Line of the Eſpalier. What I mean by the Half-Cut, is ſuch as is done in the Plaſhing or Splicing of Hedges. When we lay the more ſtubborn Shoots into the Ground, we cut them half through, and then by force bend down the Branch, letting the Wood rive or ſplit, till 'tis come to the Diſpoſition we deſign it.

When theſe have ſhot a Summer, contrive, if they are Pears or Apples, to ſave ſuch young Shoots as will bend eaſily, and can be laid down horizontally, to ſpread the Tree as much as can be, rather than make it riſe to the Top of the Eſpalier; and then obſerve from Year to Year, that every other Shoot be ſhortned, ſo that it may give new Shoots to fill the Space that the other different Shoots will leave when they grow too big for bearing, and ought to be taken away; ſo you will always have a Succeſſion of Fruit, for 'tis the young Wood that always bears.

But ſuppoſe your Trees train'd in this Way are too ſtrong in their Growth, that moſt or all their Wood is over-luxuriant to bear the next Year; then from the Middle of the Tree let a ſtrong Shoot grow up, to carry off the moſt watry Juices, and the young Wood, in the lower Part will bear, while the other may be train'd to make an Head above the Eſpalier, and will alſo bear plentifully, while the bottom Part will alſo produce abundance of Fruit.

Another way, to ſtop the too vigorous Juice or Growth of a Plant; is to cut off ſome of the great Roots about the Beginning of *May*, and make the Inciſion ſo wide, that the Roots may not join together again: for if we only cut them and leave them together, they will join, and then by our Correction we ſhall have little Benefit: for when the Juices are flowing, we find how ready Plants of different Sorts are to unite, as in the Caſe of Graffing.

There is another way to correct the great Luxuriance of a Plant and bring it to bearing, which is to put Wyers, and twiſt them hard about the main Stem and large Stems of the Plant. This will do, in ſome meaſure, to reſtrain the too vigorous Courſe of the Sap; and by that means, help to bring the Trees to bearing ſooner than otherways they would do. This Reſtraint one ought to lay upon Trees diſpos'd in Eſpaliers when they ſhoot in too vigorous a manner, for vigorous Shootings in all Trees make them bad Bearers, and the Sap muſt be reſtrain'd in ſuch Caſes, to make Trees bear well.

Another way has been try'd to cheque the Over-Luxuriance of Trees, and bring them to bear Fruit by wounding them, and cutting Notches in their great Stems; which may be done, and the Tree will for ſome Years bear very well: but then when the Tree has remain'd in a bearing State for about a Dozen Years, it will decay ſo much, that the Fruit will grow ſmall, and the Tree by degrees will periſh.

Some have made Wild-ſkrews, as they call them, about the great or main Stems of Plants, whether they were Dwarfs, Wall-Trees, or Standards, *&c.* which have brought little immediate Good, as I could find. The way of making this Wild-ſkrew, for it may do ſome good in Time, if any one has a fancy to try, is to mark the Bark of a Tree round and round in a Skrew-like Manner, five or ſix Circles, and cut the Bark in thoſe marks, to the Wood about the tenth Part of an Inch wide. Trees that have been ſo ſerv'd, loſe a great many of their Veſſels of Nouriſhment, or ſuch as regard their Growth, but the Fruit-Veſſels are not touch'd by that Means, and it is likely, as Obſervation informs me, that by this cutting, what would not have born Fruit in three Years without it, will bring Fruit the ſecond Year; or if very ſtrong Shoots were upon the Tree, the third Year may produce Fruit. There is a nearer Way than this of making Trees bear Fruit, and that is by budding or graffing them with the Buds or Scions of good bearing Trees, which having a good digeſted Sap in them, will communicate it to the ſeveral Parts of the Tree, and make it Fruitful like the Caſe of the Jeſſamine, which Dr. *Laurence* mentions of budding or graffing the ſtriped Jeſſamine upon a plain one, the yellow Colour in the Variegations of the ſtriped Sort will be in a Year or leſs communicated all over the Plant, ſo as to appear in the Leaves every where about the Plant, it is budded upon, even tho' the Bud does not take. So have I found Pears againſt Walls, and in Eſpaliers, to be brought to bearing by this Method, *i. e.* by graffing the good Bearers upon the fluſh growing Trees, and bringing them to bear.

But I muſt yet obſerve, that Eſpaliers are the moſt profitable and moſt delightful Fence in a Garden; for they give Air in the Winter to the Flowers growing in the Borders where they ſtand, and ſhade them in the Summer from the too great Heats. The beauty of making a delightful Hedge, with the pleaſure ariſing from their Flowers and Fruit, make them far preferable to Evergreens: and I ſuppoſe this is the Reaſon why Evergreens are now ſo ſeldom planted, in compariſon to what they uſed to be.

An Acquaintance of mine tells me, that when his Dwarfs bear indifferently, or not at all, he digs round the Roots towards the outſides of their Fibres, and by force takes the moſt fibrous Parts of ſome of the great Roots out of the Ground; and after they have lain a Month expos'd to the Air in *January*, he puts them into the Ground again, and the Trees will come to bear: but he judges that the Trees are injured by it, for in often digging about their Roots, he finds ſome Roots are rotted, which he ſuppoſes are thoſe he raiſed from the Ground; but they bring Fruit by this Means.

Where a Tree of this Sort will not bear Fruit, you may be ſure its Infertility is owing either to its too great Vigour, or the want of knowledge in the Management of it.

In a Standard indeed, the more it grows, the better; but in a confined Tree or Dwarf, we muſt give it a proper Government to make it bear Fruit and appear Handſome. When I ſpeak of Dwarfs here, I mean only the old Dwarf Pear-Trees, or thoſe of ſuch ſort which are laid in Eſpaliers or againſt Walls, which, whether they be one or the other, muſt be managed in the ſame Manner; for in *France*, from whence many fine Pears and other Fruits are brought to us, they uſe no Walls, but have generally their beſt Fruits treated in Eſpalier. For they don't want Walls to ripen their Fruits, they have Sun enough; and in ſhort, the Management of an Eſpalier-Tree with them, is the ſame as a Wall-Tree ought to be with us, that is, to diſpoſe the Branches in the ſame Manner upon a Wall, as one would do upon an Eſpalier: I mean, to lay in the proper Branches for Fruit-bearing this Year, and to provide for the following Year, a convenient Quantity of other Shoots, that will then bring Fruit; for elſe you will have Fruit one Year, and none the next.

And if we lay in only ſuch Branches to the Eſpalier or Wall, as will bear Fruit the ſame Year, the Tree will be ſo crouded with Fruit, if it has a favourable Seaſon to bloſſom in, that all the Fruit will be ſmall and of little Value, unleſs one was to pull half of it from the Tree, in its half-grown State, and that would weaken the Tree; ſo that 'tis neceſſary as well for the Health of the Tree, as for our Pleaſure and Profit, to keep Wood or Shoots of two Seaſons or three Seaſons upon the ſame Tree, to have good Fruit every Year, and preſerve the Tree in good Health. But I ſhall ſpeak more particularly of the Management of each reſpective ſort of Fruit-Tree by and by; in the mean while, I ſhall treat of the beſt Method of planting Eſpaliers.

Of planting Eſpaliers of Fruit-Trees.

AS it is now the common Practice to plant great Part of our Gardens with Eſpalier or Hedges of Fruit; I find 'tis neceſſary to take notice of a Fault or two, which is often committed in the making ſuch Plantations, *viz.* the planting the Trees too Cloſe to one another. I have ſeen ſome that were planted at four feet diſtance, and by being ſo near to one another, the Trees have been ſo clutter'd in their Shoots, that they could neither bring any Fruit, or a Proſpect of bearing Wood to be laid into the Eſpalier within the Compaſs deſign'd for it; but the Trees were mounting, and would in two Years more have raiſed themſelves to twice the height of the Eſpalier.

The Trees I mention here, are Apples and Pears. To remedy this Evil, there is no other way than to take up two out of every three Trees quite through the Line, that is, leave the firſt Tree of the Row ſtanding, and take up the ſecond and third; leave the fourth, and take up the fifth and ſixth; ſo leave the ſeventh, and ſo on: So will your Trees ſtand at twelve Foot diſtance, which is the leaſt that Apples or Pears ought to be aſunder, if we lay them in Eſpaliers; for then they have ſix Foot each to ſpread on each ſide their Root: but if we plant Apples or Pears in Standards, they ought to be ſet five and twenty or thirty Foot aſunder.

Every ſort of Tree to be planted in Eſpalier ought to be ſet at a proportional Diſtance, according as it would come to be a larger or ſmaller Tree in its ſtandard State; the ſhorteſt Shooters may be planted nearer together, and in Proportion, the longer Shooters ſhould be ſet at greater Diſtances from one another.

Of the Pears, ſuch as the *Quiſſe-Madam* ſhoots to a great length, and requires room, while all the other Pears require leſs. The Abricots are all, except the Maſculine and the *Bruxelles*, great Shooters, and want a great deal of room.

The Peaches are moſt of them about the ſame degree of ſtrength in Shooting as the

Maſ-

Maſculine Abricot, except the *Newington* and the *Katharine*-Peach, which bring long Shoots; and ſo the red *Orleans*-Plumb, and the white *Orleans*-Plumb, which ſome call the Green-Gage, are the briskeſt Shooters of all the Plumbs, ſpreading in one Year, as much as many other ſorts would do in two Years. Cherries will likewiſe do well in Eſpaliers, and when we conſider them, we muſt have regard that the ſmall *May*-Cherry, or Hatiſe, is the leaſt Shooter of them all; and thoſe of the Heart-kind are as great Shooters as any of them: theſe likewiſe may be put on Eſpaliers or againſt Walls.

Rules for planting of Eſpaliers to be Ornamental, and to afford Variety of Fruits.

ALL Eſpaliers of Fruit-Trees, we ought to allow ſix Foot in heighth; for if they are lower, there will not be room for the large Shooting-Fruits to ſpread their Branches for bearing; and if they are higher, they will in the Summer give too great a Shade to the ſeveral quarters or parcels of Ground they encompaſs; and if they are too High, the Plants near them will be drawn and grow weak.

I ſuppoſe two Lines of Trees to be planted for Eſpalier one hundred Yards in length each, and to be oppoſite to one another; I would therefore, in ſuch a Work, contrive for the Sake of the Beauty of that Plantation, as well as for the profitable Pleaſure of it, to ſet my Trees in the following manner; *viz.*

At the Corner, a Standard-Peach, and then a Dwarf-Tree of another Sort, that brings a white Bloſſom ſuch as a Plumb or Pear; but I here ſuppoſe a Pear for the ſake of the Diſtance, which ſhould be planted ſix Foot from the Standard-Peach, and at twelve Foot diſtance another Pear; ſo that the ſpreading Branches of each of the Pears, will be on either ſide the Root, ſix Foot.

Then again, at ſix Foot diſtance from the ſecond Pear, plant a Standard-Peach, ſo that the Stems of every Standard may ſurmount the Eſpalier Hedge a little; and then, ſix Foot beyond the Standard, plant another Pear, and twelve Foot beyond that another Pear, and then ſix Foot beyond that a Standard-Peach. So on each Side the Walk, we ſhould have the beautiful Appearance of Standards in Bloom in *March*, and part of *April*, of the Peach-Bloom; which would make a beautiful Appearance, while the Pears were preparing their white Bloſſoms, or would accompany them in *April*. And there is hardly any Flowering-Shrub ſo gay its Bloſſom, as the Fruit-Trees I mention, beſides the Benefit of the Fruit.——— I could have mention'd the Almond, becauſe it comes early, even in *February*; but as it is apt to grow too quick to keep meaſure with our Eſpaliers, and does not bring a Fruit agreeable to them, I ſhall leave that Tree for ſome other Place: tho' either the Peach or the Almond-Standards, might be train'd up in a Pyramid, as I would wiſh them to be.

Again, we may have another way of planting Eſpaliers; that is, to place an Apple next the Corner for the Eſpalier Way, and twelve Foot from that, plant your firſt Pear-Tree; for the Pear-Tree Shoots, if they are lead to bear Fruit, will ſp ead towards the Apple ſix Foot; and the Apple, which ſhoots as much, being planted in the Corner, will as eaſily meet the Pear-Tree, and the Branches of the Apple-Tree on the other Side, will be turn'd another way; that is, to the other Walk: and then plant your Pears at the ſame Diſtance as before directed, *viz.* Two Pear-Trees, and then an Apple-Tree. But the ſecond Apple-Tree now muſt be twelve Foot from the ſecond Pear-Tree; and then two Pear-Trees more, and then an Apple-Tree at the like Diſtance, and ſo on.

The Reaſon of this, is to ſhew Pannels of different-colour'd Flowers in your Eſpaliers; for the Apple-Tree has a reddiſh-colour'd Bloſſom, and the Pear white, ſo that when theſe are in Perfection, the Apple-Pannels will make a regular and beautiful red

Colour againſt the fine White of the Pear-Bloſſoms; which Contraſt will yield a very delightful Proſpect, eſpecially when the Apples are juſtly placed and well managed.

But as I have placed the Apples and Pears together, ſo let me now make a View through a Walk between two Eſpalier Hedges of Plumbs and Peaches, becauſe they both bloſſom early and at the ſame time: and in this Caſe we may uſe our Pleaſure, whether one would have a Standard-Peach to begin with or a Standard-Plumb; for if you chuſe the Peach for the Standard, then you muſt have two Plumbs before you come to the next Standard-Peach, and ſo on. But the Diſtance theſe Trees require, is very different from that of the Pears and Apples; for where they muſt have twelve Foot, the Plumbs need not have more than eight or nine, becauſe they are not ſuch luxuriant Shooters. I think there can be no greater Beauty in a Garden, than to ſee the Spring uſher'd in, in ſo pompous and delightful a Manner, for theſe bloſſom as ſoon as any Flowering-Shrubs, except the Mezerion; and the Diverſity of Colours is very engaging between thoſe of the Peach and the Plumb, for you have the pure Bloom Colour, the White and the tender Green of the Leaves diverſly mix'd.

But ſuppoſe we were to plant the Peach and the Plumb in Pannels, as I have mention'd tion'd before of the Pears and Apples, or Pears and Peaches; it would ſtill afford an extraordinary Proſpect, when we have Standards, as I have hinted above, planted at certain Diſtances: the Stems of them are ſo many living Stalks to ſupport the Eſpalier. And thus far have I given General Rules for planting of Eſpaliers, and now come to Particulars.

Of Pears in Eſpaliers.

WE muſt conſider, when we plant Pears in Eſpaliers, that thoſe ſorts of Pears which require the leaſt aſſiſtance of Heat to ripen them, are the moſt proper; but the Winter Bon-Chretien requires a Wall, as do all thoſe Sorts which come to eating in *January*, *February*, and *March*, as the *Bezy de Chaumantel* and ſuch like: and for ſuch ſorts of laſting Pears, they ought to have the beſt Expoſure, that they may have all the advantages of the Sun and Heat that may be, for elſe they will want that fine Reliſh and Flavour which we find in the Pears of that ſort, which are brought over every Year from the Gardens about *Orleans* in *France*: and without they are fully ripen'd, they are little better taſted then a Turnip. But I ſhall explain the way of mending theſe Late-Pears more at large, when I ſpeak of planting them againſt Walls. In the mean time, when we plant theſe ſorts of Pears in Eſpaliers, which are the moſt proper for ſuch Direction; that is, the ſeveral kinds which ripen or are eatable before *Chriſtmas*, remember to ſet them at twelve Foot diſtance, and bend down every Branch towards the Ground that will well come into the Line of the Eſpalier, and cut away the reſt, not ſuffering any Shoot to ſtand upright, for that will run away with all the Sap: but if any is ſo diſpoſed, after you have laid down one or two to ſpread on each ſide, either cut it cloſe, or elſe bend it with the reſt towards the weakeſt Side of the Tree; and do this as ſoon as each Tree is planted, taking care to ſpread the Branches in an exact Line to preſerve the Regularity of the Hedge or Eſpalier. I adviſe this, becauſe if we were not to bend down the Branches as ſoon as the Trees were planted, but defer it till a Fortnight or a Month after, we ſhould, in that Work, break the young ſhooting Roots, and ſpoil our Tree; ſo 'tis the beſt way to do it at firſt: And Experience ſhews us, that a Tree planted in a favourable Seaſon, will begin to make new Roots in three or four Days.

We may tye down the Shoots of our young planted Trees to ſhort Stakes the firſt Year, and in the ſecond Year ſet up our Eſpalier, which may be made of Arbour-Poles, ſuch as Aſh-Shoots, or Poles of fourteen or fifteen Feet in length; and chiefly I recommend, that you are not too ſparing of them, for if you place them too thin, you will want neceſſary hold for many Shoots of your Trees, and then, rather than a proper bearing Shoot ſhould ſtand a little out of Order, it is generally cut off, and ſuch Shoots which are the ſhorteſt, are thoſe which are the beſt diſpoſed for Fruit-bearing; ſo that by loſing any of them, we are ſure to loſe a proportionable Quantity of Fruit.

If a Tree is in Heart and Vigour, preſerve the ſmaller Shoots, and keep your Eſpalier as free from large Shoots as poſſible, unleſs in the firſt training up your Eſpalier you lay ſome of the large Shoots horizontally, to ſpread your Tree, and from them will come bearing Shoots.

But if your Plants only put forth ſmall and weak Shoots, then there is ſome Fault at the Root, which ought to be corrected by laying the Blood of Cattle, or the Inwards of them about the Roots, and ſome freſh Earth; this Method is incomparable for ſtrengthning and recovering decay'd Trees, and that Work ſhould be done about the End of *October*, or the Begining of *November*.

Another way we may take to help a decaying Tree, if it is a Sort of Fruit that is ſcarce: When we find it produce only weak Shoots, plant on each ſide of it, within in three Foot of its Stem, a ſtrong Stock or Wilding, to inarch ſome of the Branches upon; and in *May*, chuſe out two of the beſt Branches of the ſick Tree, and inarch them on the Stocks, and ſo let them remain growing for a full Year, by which means the ſtrong and vigorous Juices of the young Stocks, will paſs through the ſickly Plant and reſtore it. Some of theſe Trials were made fourteen Years ago, by a Gentleman in his Gardens near *Kenſington*, with ſo good Succeſs, that the great Tree was ſaw'd from the Root, and being wedged up, yet remain'd Bearing and Shooting freely by the ſtrength of Nouriſhment it receiv'd from the two Stocks, it had been inarch'd into the Year before, having loſt all correſpondence with its own Root, which made the ſame Gentleman afterwards inarch a young bearing Tree in a Pot between two free Pear-Stocks; and when it had taken, expos'd even the Root of it to the Air, which has been ſince practis'd by many as a Curioſity to ſhew the Circulation of the Sap; but the main Deſign was to ſhew, that by tranſfuſion of Sap from an healthful Tree into a ſickly Tree, the ſickly one would gain Stength and recover: and there is no more difficulty in underſtanding this, than in all ſorts of Graffing, the Sap communicates itſelf from the Stock to the Scion.

As for the pruning of Eſpalier Pear-Trees, you ſhould always obſerve, that you have no Wood in your Eſpalier above three Years old, except the main Branch or Stem, or ſuch as muſt neceſſarily be the Leaders to produce ſuch Shoots as I ſpeak of, and then you may expect Fruit every Year.

Again, When you lay in any of the large Shoots, leave them their Length, and they will produce bearing Wood; and when you cut off any of your large Shoots, cut them clean home to the Stem from whence they grow.

Another thing to be taken notice of, while I am ſpeaking of Pears is, That a Pear ought not to be gather'd till it will eaſily leave the Tree, or part from it without tearing.

I am inform'd there are not leſs than three hundred Sorts of Pears in ſome Catalogues; but it is well if we have forty good Sorts, worth the Pains required in their Culture. And as it is common for many Gentlemen to have Seats left to them, wherein there have been large Collections of Fruits made, it is almoſt as common to meet with ſome in ſuch Collections as are not pleaſant to them: ſo the way to remedy that, if an Eſpalier be in good Order, is to bud ſuch Sorts as they like, upon thoſe which are not agreeable to them, and to put at leaſt ſix Buds upon a Tree; and without diſturbing the Faſhion or Order of the Eſpalier, in two

Years you may have your whole Tree full of the Fruit you deſire: for as the Buds or Inoculations grow, you may cut away the Wood of the Sort you diſlike, and keep your Eſpalier full, till you bring it to bear only ſuch Fruit as you the moſt deſire.

We muſt note, that a Loamy Soil is beſt for a Pear, but it will thrive in the ſtrongeſt blue Clay, where it will ſhoot very Strong and Luxurious Branches without bearing for ſome time; but that may be corrected by managing the Roots, as above directed.

Obſervations concerning the Management of Wall Pear-Trees.

WHEN I ſpeak of Trees to be planted againſt Walls, they ought to be managed in the ſame manner as I have mention'd for Eſpaliers; that is, lay their young Shoots horizontally, beginning with the loweſt you can get, let them be ſtrong or weak: for one ſhould not let the firſt Branches or Shoots lie more than ſix Inches above the Ground for common Pears, and for the longeſt Sort of Pear, which is Dr. *Udal's* great Pear, call'd by ſome the Union-Pear, whoſe Fruit is about that Length, one may allow eight Inches, and as our Trees grow more and more, let the Horizontal Branches, if we have room to ſpread them, be at leaſt ſix Inches aſunder ; for out of them we ſhall for many Years have bearing Wood ſhoot out at every Knot, if the Shoots are not top't. But ſee farther my Advice given concerning Eſpaliers.

When we plant a Pear againſt a Wall, let the main Stem be ſet ſix Inches from the Wall, to give the better Nouriſhment to the Root ; and when we plant it, obſerve that the Tree be inclining to the Wall, that when we come to lay in the Branches, we need not ſtrain or break the Root, by bringing the Branches to the Wall.

A Pear for a Wall may be managed much better, if it be upon a Quince-Stock than upon a Free-Stock, becauſe upon a Quince, a Pear will be leſs Luxurious, and take much leſs room in its Shoots ; but then a Pear upon a Quince will not laſt ſo long, as one upon a Free-Stock.

We muſt remember in planting of Pears againſt Walls, that they require at leaſt ſix Foot on a ſide to ſpread their Branches ; ſo that the whole Tree when 'tis perfect, will ſpread twelve Foot.

If then a Peach ſhould be planted next to a Pear, we ought to allow firſt ſix Foot from the Root or Stem of the Pear, for the Pear to grow in, and then we ſhould meaſure off about four Foot for the Peach, which in all will make ten Foot between the Trees, that is, ſix Foot for one ſide of the Pear to ſpread on one ſide, and four Foot for the Peach; for a Peach ſeldom ſpreads above eight Foot in all, and a Pear, which is the moſt Vigorous Plant for ſhooting, if one allows it twelve Foot, if it ſhould be one of the ſmalleſt Shooters, 'tis enough; unleſs it happens to ſhoot like the Pear call'd the *Quiſſe-Madam*, and then it will take up more room; but as that is a Summer Pear, it has nothing to do with Walls: But I mention it, becauſe ſome have been ſo Ignorant as to plant that very Pear, which wants no help with us, againſt a Wall. But ſome of the Winter-Fruits ſhoot almoſt as ſtrong as the *Quiſſe-Madam*, and therefore ſhould have more liberty than the others.

One may ſee in a Nurſery, when we buy Trees, or if by order they are ſent into the Country, one may know by their Shoots, what room they will require if they are ſound Plants: On the large Shooters you will find Shoots of three or four Foot long of one Summer; and in the ſmaller Growers, you will perhaps find a Maſter-ſhoot of two Foot or two Foot and a half long, proportionably thick; that is, the Largeſt, about as thick as one's Thumb, and the Smalleſt about an half leſs. And if they are prun'd to be laid into the Wall, as the Gardeners Term is, leave the vigorous Shoots two Foot at leaſt in length, and the ſmaller about a Foot long; but the ſmall Shoots ſhould not be pruned at all, nor, if there is room enough, would I prune the very long ones, if they can be laid Horizontally: but let them ſeek their natural Deſign, as far as the Liberty of the Wall will allow; and then, like Standards, they will bear plenty of Fruit, for Standards that bear the beſt are never topt; and they have always Fruit without pruning, when our Wall-Trees want Fruit frequently, by indiſcreet or bad Pruning. When I mention this, I don't ſpeak of my Brother Gardeners, but of thoſe who put on the Apron, and never had an opportunity of doing any more in a Garden, than wheeling a Barrow in ſome Work that was deſigning or laying out. We have a great Number of thoſe who, in one Seaſon, will with their Knife or Sheers ruin all the Fruit-Trees they are put to; but at moſt, they will ſpread a Tree like a Fan, and think they have done Wonders. But 'tis not the regular Figure of a Tree in the Winter, that will give us Fruit in the Summer: one ought indeed to make them appear pleaſant to the Eye, if one can, when the Leaves are off; but in every Cut we take, we ought to judge what will be the Effect of our Pruning, when the Seaſon for Flowering will happen; for there our Skill will be expoſed, and the Proof will be, who has pruned well, and who has done otherwiſe. But I have ſaid enough about the pruning of Pears in Eſpaliers, or againſt Walls, to give every one an Idea of keeping ſuch Trees in Compaſs, and making them bear Fruit; and I ſhall now proceed to the Culture of Apples on Eſpalier, and againſt Walls, if you will have them; but I never found they were much mended by Walls, unleſs in one Inſtance, the Juniting-Apple ripen'd ſooner, by being planted againſt a South-Wall, by three Weeks, than it commonly uſed to do in a Standard, in the open Ground.

Remarks tending to the Improvement of Apples in Eſpaliers.

THE Apple, like the Pear, is more or leſs free in its Shoots, as it happens to be graffed upon a *Free-Stock*, or a *Paradiſe*; and, again, ſome Apples will ſhoot more Luxuriant than others, let them be upon what Stock ſoever they are graffed upon.

The *Holland's*-Pippin will ſhoot more Wood in a Year, by about a third, than the Golden-Pippin; and ſo when we place them in Eſpaliers, we ought to have that conſideration, and provide a Diſtance accordingly, that either of the Trees may have due Liberty to ſpread themſelves.

The *Holland's*-Pippin ſhoots as ſtrong as the *Quiſſe-Madame* Pear, and requires as much room, while the Golden-Pippin does not require above eight Foot, to allow it

Space enough; and ſo as we obſerve the Strength of Shoots in Apples, as I have obſerv'd above in Pears, we ought to place them accordingly. And if we make an Eſpalier of Apples, aſſort them, ſo that one may preſerve the Diſtances or Dimenſions of their Panels in Eſpalier, and plant a Standard-Pear at every regular Diſtance, to yield a white Bloſſom, when the Apples put forth their beautiful Red.

Or the Apples and Pears might be planted in Panels alternately, as I have ſpoke before of the other Fruits.

If we plant Standards of any Sort in our Eſpalier, they ſhould be kept in a Pyramidal Figure above the Eſpalier, and not let them ſpread by any means in a wild Manner; for as the Eſpalier is a Scene of Regularity, ſo the Ornaments we give it by the Standard-Tree, ought to be ſo: or we may cut the Heads of the Standard-Plants upright, over the Eſpaliers, in the Faſhion of a Fan, on the Side next the Walk; and if one will, let the Branches on the other Side, over the Quarter, grow at their Liberty, which would certainly be a means of giving more Fruit. But whenever Trees ſpread in their Heads, 'tis certain they give a Shade and a Drip; ſo it ought to be conſidered, whether what is loſt by Under-Plants, from the Shade and the Drip, will countervail or be worth the Fruit they may produce.

The time of Planting theſe, as well as Pears, is in the Spring, or in the Autumn, unleſs one would plant at Midſummer, in Mud, according to the Method lately ſet on Foot. Apples ſhould be pruned like Pears.

Of Peaches in Eſpaliers, and againſt Walls; Obſervations concerning their Management.

WHAT I ſhall here relate concerning Peaches in Eſpaliers, is, with regard to their Management, the ſame that they ought to have againſt Walls.

Peaches and Nectarines have the ſame way of Management, and ſo they may be treated of, all under one Head: neither of theſe love the Knife, for frequently, by cutting them too much, they run into Gum, and then periſh by the Canker.

Plant them in the Spring, or in Autumn, but the Autumn is the beſt for them, becauſe they open their Bloſſoms early, that is, in *March*; however, they will grow with a little Care, even when their Bloſſoms are opening, and one may alſo graff them at that time.

In the Directing theſe againſt an Eſpalier, lay their Shoot Horizontally, and when you give them the Spring pruning, whatever you cut off, cut it clean by the Stem, unleſs you have a large Shoot which may be wanted to fill the Tree; and then top that ſo much, as till you come to the Triple-Buds, and they will give you Fruit-bearing Shoots for the Year following, which Shoots at Midſummer, will be perfect, and ſhould be ty'd then to the Eſpalier, as many of them as will lie eaſily to it, while the others that ſhoot forwards ſhould be quite cut out. So againſt Walls, dreſs your Peaches and Nectarines in the ſame Manner.

When we plant Peaches in Eſpalier, we muſt conſider that thoſe which ripen the earlieſt, are the beſt, and ſo the lateſt for the Walls. For Eſpaliers, the *Anne*-Peach, and every other ſort that ripens as late as the *Newington*-Peaches, or in good Years, any of the Peaches that come before the *Katherine*-Peach, will do; but for Nectarines, we muſt have only the very forward Sorts in Eſpalier, for elſe they will not be high flavour'd, as they are againſt Walls; and even all the Summer-Sun, with the help of the Wall, is not powerful enough every Year to ripen the Fruit of ſome Sorts; therefore if we would plant the very lateſt Nectarines againſt Walls, let the Walls be ſuch as are called Fire-Walls, which are now much in Practice, and force ſuch Nectarines to bloſſom a Month before their time, that their ripening Seaſon may be in the hotteſt Time of the Year.

'Tis to be noted, that a Peach and Nectarine loves a loamy deep Soil.

The Management of Plumbs in Eſpalier, or againſt Walls.

THERE is little difference between the Management of the Plumb and the Peach; for as Peaches and Nectarines are graffed upon Plumbs, ſo 'tis the Plumb that directs the Nouriſhment from the Earth to the Peach or Nectarine that is ingraffed upon it, and then the ſame Soil is good for one or other; and ſo the Shoots likewiſe grow nearly in the ſame Manner as thoſe in Peaches: but the Plumb does not want ſo much Sun to ripen the Fruit as the Peach, and therefore Plumbs will do very well in Eſpaliers; but as is remark'd before, one muſt conſider the proper diſtance between Tree and Tree, the great Growers to have greater Space than thoſe of the ſmaller Shoot.

It is remarkable that the Plumbs in Eſpalier, are more caſſant or crackling in their Fleſh, than thoſe of the ſame Sort againſt Walls, and come a Fortnight later than the Wall-Plumbs; but the Wall-Plumbs are higher-flavour'd than thoſe in Eſpalier or upon Standards.

The Times of pruning of Plumbs, are the ſame with thoſe of pruning the Peach.

Moſt ſorts of Plumbs will dry extreamly well in a gentle Oven; to be gather'd in a dry Day, a little before they are ripe: the beſt way of drying them is to lay them upon Wire-Sieves.

Particular Inſtructions for the Management of the Abricot in Eſpalier, or againſt Walls.

THERE is hardly a greater Shooter, or quicker Grower, than our large kind of Abricots, I mean the *Roman*, the *Turkey*, and the *Orange*; but the Maſculine is a ſmall Shooter, and the *Bruxelles* Abricot, if it is upon a right Stock, is moderate enough in its way of Shooting: however, let it be as it will, the *Bruxelles* kind, may be kept within tolerable Compaſs.

The maſculine Abricot, and the *Bruxelles* to be planted in Eſpaliers being conſider'd as the ſmaller Shooters, may be planted within eight Foot of one another; but the other Sorts will require twelve or fourteen Foot diſtance, eſpecially when they are planted againſt Walls; for the like Kinds of Abricots want Walls to ripen their Fruits in full Perfection, in ſome of the *Northern* Parts of *Great Britain.*

But 'tis neceſſary to have Abricots as well againſt Walls as in Eſpaliers, even in the warmeſt Part of our Climate, to have the

Fruit at different Seaſons, of the ſame Sorts; and moreover, to have the ſame Fruit bear different Taſtes.

But there is yet a Regard we ought to have to the Abricot, more than is commonly obſerv'd; and that is, That as it generally (I mean the late Sorts) likes the Shelter of a Wall, ſo as I have obſerv'd before, it requires Room; and even will ſpread the ſide of a Barn fifty Foot, as may be ſeen in *Oxfordſhire*, at the Right Honourable the Earl of *Macclesfield*'s; and about as much I have obſerv'd it in ſome other Places. The Soil there is Chalky, which is enough to denote, that ſuch a Soil is good for an Abricot, tho', as I mention'd before, that where Plumbs would grow well, the Peaches would do ſo too, by being engraffed upon them. So the Abricot, which is likewiſe graffed on a Plumb, may teach us, that the ſame Soil which is agreeable to one, will be agreable to the others: but the Abricot does not love the Knife no more than the Peach; and lay the Branches horizontally.

Of Cherries, their Management in Eſpaliers and againſt Walls, particular Obſervations.

CHERRIES not being ſuch free Shooters as the Abricot, and all their Sorts being early Ripe, will make good Eſpaliers, to be planted at eight or nine Foot diſtance: The Time of Planting them, is the ſame with the Fruits above mention'd; we have great Variety of Sorts: but I would not adviſe them all to be planted againſt Walls or Eſpaliers; for the *Flemiſh* or the *Kentiſh* Cherries, are always Sour upon Walls; and the White-Heart does much the beſt in a Standard. But as for the Dukes and other kinds of Hearts, they will do well upon Eſpaliers or Walls; and we have moreover the little *May* Cherry, which, by way of Curioſity, one may plant againſt a forward Wall, to bring its Fruit early; but in Eſpalier, it will make but a trifling Appearance.

The Standard Cherries ſo call'd in the Nurſeries, are of the kinds I have mention'd, good to ſet between Peach-Trees, or Abricots or others, becauſe the Heads of the Cherries will at the planting of the Wall, fill the upper part, while the Dwarfs of Peaches, Nectarines, and Abricots fill the Wall at the bottom; and the Wall by that means will be ſoon cover'd. But then as the Peaches or other Dwarfs grow up, the Cherries ſhould be taken away, and ſet out for Standards properly in open Ground. They will indeed make but an aukward Appearance the firſt Year of planting, becauſe they have been flatted to a Wall; but the ſecond Year they will be much better in their Figure, and the third make good Heads; but when I ſay this of the Cherry-Trees taken from a Wall, I ought to mention, that they will bear good Fruit from the firſt Year of tranſplanting: however, ſome who love Regularity, will cut the Heads or Tops down, when they replant them; but then we loſe two Years Fruit, and the Trees are apt to grow gummy. But I leave that to the Pleaſure of thoſe who practiſe it, whether they will want Fruit two Years, and ſuffer an irregular Appearance, or chuſe a faſhionable Head without Fruit.

If I was to plant all the Sorts of Cherries upon a Wall, the little *May*-Cherry ſhould be one, for the ſake of its forward Fruit, and particularly I would have it in the beſt Expoſure, that is, againſt a full *South* Wall; and then one ſhould have all the ſorts of Dukes, and the Black Hearts of every Kind. But the Morello will be larger againſt a *North* Wall, than in any other Place, and ſo indeed would be every other ſort of Fruit of that kind; but they would not be ripe early enough, nor have the fine Taſte expected in them.

When the Morello Cherry is in Standards or Eſpaliers, they are ſmall in compariſon with thoſe on the *North* Walls; for Shade will make every Fruit large, as ſure as Sun will make every Fruit ripe. So whether we will have large Fruit imperfect in its Flavour, or ſmall Fruit well taſted, depends upon the Minds of the Planters.

It is neceſſary to obſerve, that if we prune Cherries in *May*, in their young Shoots, down to four or five Buds, they will make Shoots that will bloſſom at the End of the Year; and I have heard, that if one cuts down Cherry-Trees to the ſame Point in *April*, when they are opening their Bloſſoms, they will bring good Fruit in *September*; eſpecially ſuch as are againſt Walls: for ſome Gentlemen of my Acquaintance, who are extremely Curious in thoſe Things, have try'd the Experiment many Times; one at *Wandſor* in *Surrey*, and another in *Middleſex*, where the Morello, and *Flemiſh* or *Kentiſh* Cherries, have bloſſom'd in *Auguſt*, and have had good Fruit in the End of *September* or *October*.

This croſs cutting of Cherries, would be very amuſing and pleaſant to the Curious Gentlemen in Gardening, to have, in (what one may call) a natural way, Cherries ſo late in the Year; and one might have any other Fruit to bloſſom and bear Fruit by the ſame manner of cutting; but then we ſhall want Sun to ripen them: And if we ſtop the Bloſſoms of the Strawberry, and take them quite off as ſoon as we ſee them bud in the Spring, they will bloſſom again at the latter End of the Year, and bear good Fruit, and in good Quantity; but while I make this Compariſon, I ought to take notice, that the Cherry is a Tree, and the Stawberry an Herb ; but as they are both Plants, Nature gives them the ſame Intent, as much as their ſeveral Powers give them Leave.

The Cherry is a Tree, which aims at bringing its Fruit in *May* or *June*, and the Strawberry in the ſame Month ; but they both from their Bloſſom will ripen their Fruits in ſix Weeks, without forcing by artificial Heats. However, if we ſtop the Progreſs of their Bloſſom in the Spring, by cutting, they will certainly have it in the Autumn, and according to the time of the Growth and Ripening the Fruit of both of them, they will bring good Fruit in Autumn ; but this will ſpoil a Cherry-Tree in a few Years, for it gives but weak Shoots at the latter End of the Year, in compariſon with thoſe, which it would give voluntarily in *May*.

Memorandums *concerning Vines in Eſpaliers, or againſt Walls.*

MY particular Obſervations of Vines, amount to this extraordinary Direction, *viz.* That if we have Vines in Eſpaliers, or againſt Walls, we muſt always expect the young Wood or Shoots to bear Fruit; for 'tis from the young Wood only, that we

have

have Shoots that bear Grapes. I mean by the Shoots which we ought to preſerve, ſuch as have ſhot the laſt Summer; and of thoſe in an irregular Vine, ſave the Strongeſt, in which you will ſee two ſorts of Buds and Joints. In one part, the Buds will lie pretty near one another; and in the other, for three or four Joints beyond them, the Buds will be ſet at long diſtances; and theſe laſt will not bear Fruit till the ſecond Year. Beyond theſe again, we may find the Joints ſhorter for three or four Buds, which Buds will bring Fruit the ſame Year. One of my Acquaintance, had a Shoot of this ſort, which he carry'd along a Wall near twenty Foot, and it brought plenty of Grapes; and one may remark likewiſe, that the Shoot of this Vine had its bearing Branches proceeding from the long Shoot of the Year before, in the Manner I have related, that is, the ſhort Joints in the Branch, had Buds for Fruit-bearing; and the longer Joints brought good Shoots for bearing Branches the Year following: and then after four or five of them came Buds for Fruit, bearing again at ſhort Diſtances from one another, not above four Inches, while the others, which did not bear, were ſix or ſeven Inches aſunder.

We have ſome Vines, which are much ſtronger Shooters than others; the largeſt may be as thick as one's Thumb, while the ſmaller Shooters will bring their beſt Branches not thicker than a Tobacco-pipe. In the common pruning of theſe Shoots, they ought to be left long in proportion to their Thickneſs: But that a Stranger to this Buſineſs, may be ſure to judge of the right Proportion, let him leave ſo much of each Shoot upon the Tree, as has its Joints ſhort and the Buds full, which will be about four or five; and then the Branch ſo pruned on the white Frontiniack Grape, which is a large Shooter, will be about two Foot and a half long; and of one of the ſmaller Shooters, a Branch well pruned will be about fourteen or fifteen Inches. As for the ſmaller Shoots of Vines, ſuch as are but nine or ten Inches long, cut them clean away, and when your Vine is pruned, tie the new Branches deſign'd for Fruit to the Eſpalier horizontally, and keep them as near the Ground as poſſible; and ſo treat your Vines in the ſame manner againſt a Wall; and even thoſe Vines in a Vineyard, muſt have the ſame Treatment with regard to pruning, and the pruned Shoots ty'd down to Stakes near the Ground.

But there is one thing more I muſt obſerve, with regard to bringing Grapes forwarder than the natural Seaſon in *England* will do.

When I liv'd at *Tibbalds* in *Hertfordſhire*, about five and thirty Years ago, there was a Vine planted againſt the Kitchen Chimney,

ney, which by the Heat of the Kitchen-fire, began to ſhoot about *Chriſtmas*, and then a Frame was put up before it, to preſerve the tender Shoots from the froſty Air abroad, till the Weather grew mild and gentle; by this means, Grapes were full ripe in *May*, and the Branches were ſo large, that one of them fill'd a Pottle Basket, and was preſented to King *William*: ſince which Time, it is commonly treated in the ſame Manner, and brings Grapes as it did in my Time, as I am inform'd by ſeveral Gentlemen, who have been there lately: and I ſuppoſe all the new Inventions for forcing of Grapes, were taken from the Vine at *Tibbalds*.

Curious Remarks of Currans and Gooſberries.

THE Curran, tho' it generally appears to be a Shrub, is capable of making a large Tree, even to grow above twenty Foot high, as there are ſome now in ſeveral Curious Gardens in the Country, which cover the ſide of an Houſe, and produce vaſt Quantities of Fruit, which laſt to *October*. One of theſe Trees is at *Cambridge*, in the Garden belonging to Mr. *Urlin*, a curious Gentleman living in the *Petty Curée*, where it is common for his Servants to gather Currans with a Ladder: The Stem of this Tree, is very Strong and Woody, ſo that I am perſuaded, one might, with a little Pains, make a noble Standard of it in a Garden, which would make an extraordinary Appearance; and as it is certain, that it will grow ſo High, it would as ſurely make very good Arbours.

This Tree or Buſh, as it is often managed, has its Fruit ſpoil'd; for when the Fruit is ſet and near grown, 'tis a Cuſtom to cut off the Tops cloſe to the Fruit-bearing Shoot, and ſo the Fruit becomes ſmall and thick-skinn'd; and the Tree will then grow Weak and turn Moſſey. All the Deſign ſuch Pruners can have, is, I ſuppoſe, to make the Fruit ripen early; but the Tree is endanger'd by it.

The Goosberry, tho' it is a Shrub, may be raiſed to a Tree of twelve Foot high; if one would encourage the leading Shoot, as I have mention'd before of the Curran: but it muſt be ſupported by a Stake, and when we once let it ſhoot or ſpread for a Head, never cut it, but let all the Shoots on the Top ſpread freely. It is not uncommon to ſee Goosberries ty'd againſt the Wall of an old Houſe, which make a Covering of eight or nine Foot.

Theſe *Memorandums* are, what I am perſuaded few have thought on; and as for the Treatment of theſe Fruits in general, every one knows: So that I ſhall now proceed to give my Obſervations on Standards, and Half-Standards.

Remarks concerniug Standards and Half-Standards.

STANDARD-Trees are chiefly Apples and Pears, and Cherries; the firſt loves a tender Soil, and the latter chuſes a ſtiff Soil: the Apple-Tree will ſoon ſpread its Branches, as near the Ground as we will ſuffer it; but the Pear will mount to a great Height. To plant Apples in an Orchard, they ſhould not be nearer one another, than five and twenty or thirty Foot, that they may ſpread their Branches freely, and have Air enough about each Tree, to fill the Fruit, and that as many Branches as poſſible may enjoy the Sun.

Pears to be planted in Standards, may be ſet at twenty Foot diſtance, becauſe as they are given to mount or ſhoot upright; they want leſs room for the ſpreading of their Branches, than the Apple.

Either of theſe Trees, however, will in time want Pruning, not that their Shoots ſhould be topt; but if they are luxuriant in their Growth, they will become too full of Branches, and the Fruit grow ſmall: therefore, when we obſerve this, thin the Tree in *November* and *December*, by cutting out ſuch as may hinder the free paſſage of the Air, taking care to cut them clean by the Stem; and again, when we ſee young Shoots riſing upright from the ſpreading Boughs, cut them cloſe down, for they draw away abundance of the Sap, that ought to go to the Nouriſhment of the Fruit.

If either your Standard Apples or Pears, grow ſo Luxuriant, that they don't bear well, open the Ground about them, at the end of *January* or beginning of *February*, as the Weather happens to be favourable, and cut off ſome of the main Roots; and they will ſoon come to bearing: or elſe treat them as I have directed in the Article of Dwarf Apples and Pears.

As for Standard Plumbs and Cherries, they want no Pruning after they begin to grow, for they hate the Knife; tho' ſuch of them, as we think proper to forward, by planting againſt Walls, are forced to undergo the Diſcipline of Pruning; but the leſs they are prun'd, the longer ſuch Trees will laſt.

Obſervations concerning Half-Standards.

WHAT we call Half-Standards, I have explain'd before; and of theſe, the Peach, the Plumb, the *Bruxelles*-Abricot, and the Cherry, are the chief: for Apples and Pears will run out of compaſs.

Theſe ought, when we plant them in Borders or Beds, to ſtand fifteen Feet aſunder; that the Flowers or Plants under them, may have Air and Sun. As to their pruning, it is like that of the Standard, ; but when theſe attempt to grow high, cut cloſe down ſome of the moſt aſpiring Branches, and cut ſome others within four Buds of the main Branch, by which Means, the Deficiency of the loſt Branches, will be made up the ſame Year.

Of the Marks, by which one may know the bearing Buds, on all Fruit-bearing Trees of our Gardens.

AS I have given a View of ſuch Improvements of the Fruit-Garden, as are New, and have not been yet deliver'd to the Publick; I ſhall conclude my Remarks with Obſervations relating to the Difference between Fruit-bearing Buds, and thoſe Buds which are deſign'd for making of Shoots. As a general Rule, thoſe Buds which are the moſt turgid or full, and the roundeſt, are the bearing Buds, and the longer Buds which are generally pointed, are the Buds for making of Shoots.

The Pear moſt commonly has Wood of two Years, before we can find bearing-Buds upon it; which diſtinguiſh themſelves, by ſhewing themſelves much larger than the others, and riſing upon little Woody Knots.

Apples diſtinguiſh their bearing Buds, in the ſame manner as Pears.

The bearing Buds of Plumbs, are of an oval figure or roundiſh, and the ſhooting Buds are pointed.

The Buds of Cherries, in the *May* Cherry, the *Flemiſh*, the *Kentiſh*, and *Morello*, when they are for bearing, are round Buds; but thoſe that are pointed are Buds for ſhooting: but the Heart-Cherries will bring bearing Buds in Cluſters, and ſo will the Dukes; however, thoſe Buds in Cluſters are rounder than the others.

Peaches have triple Buds, that is, the middle is a Shooter, and the others on each ſide are for Bloſſom; the middle one is pointed, and the ſide one's rounder: however, the Midſummer before they blow, you may know them.

The Abricot is much like the Peach, and therefore when any one would prune a Tree, let him peruſe theſe Obſervations, and he will know the better which Parts ought to be cut, and which ſhould be left.

As to Vines, I have pointed out which are the bearing Shoots, and which are not; ſo that I think it impoſſible for a Stranger to miſs of Fruit enough if the Seaſon is favourable, when the ſeveral Sorts of Fruits are in Bloſſom.

Now I have gone thus far, it is neceſſary to give ſome Directions concerning the enriching our Country with Plants and other Curioſities from Foreign Parts, that *Great-Britain*, if poſſible, may poſſeſs the Beauties and other Benefits of the whole World.

On this Occaſion, I cannot omit mentioning, how much the Improvement of our *Engliſh* Gardens is owing to the Care and Induſtry of the late Dr. *Compton*, Biſhop of *London*; the late Dutcheſs of *Beaufort*, in the Gardens at *Badminton*; *Samuel Reynardſon* Eſq; at *Hillingdon*; Dr. *Udall*, at *Enfield*, *William Curtis* Eſq; Sir *Charles Wager*, Mr. Secretary *Johnſton*, *Henry Marſh* Eſq; Sir *Matthew Decker*, the Honourable and Reverend Dr. *Lumley Lloyd*, *Charles Du Bois* Eſq; *John Brownell* Eſq; in *Cambridgeſhire*; the Right Honourable Sir *Robert Walpole*, Mr. *John Warner*, Mr. *Peter Collinſon*, Dr. *Sherrard*, Dr. *Bradley*, the Right Honourable the Earl of *Burlington*, *Samuel Trowell* Eſq; the Right Honourable the Earl of *Derby*, with many other curious Gentlemen, who, by their Correſpondence, have furniſh'd us with vaſt Varieties from moſt Quarters of the Earth, as well as given us many uſeful things, which, perhaps, without them would have never appear'd in our Climate; but eſpecially the good Judgment and Skill in collecting Rarities abroad, is remarkable in the Reverend Mr. *John Clarke*, who is juſt return'd from his Travels, about *Virginia*, *Carolina*, the *Maderas*, and other parts of *America*; there is ſcarce a Plant that has eſcaped him, or a Bird, Fiſh, Quadruped, or Inſect, that he has not taken cognizance of: ſo that from his remarkable Collection, one may be fully acquainted with the Uſe and Beauty of every thing in the Countries where he has been.

His Method of Collecting the Plants, is ſo good, that it may ſerve as a Pattern to thoſe Gentlemen who like that Study, when they trace other Parts of the World.

Firſt, this Gentleman has been careful to dry Specimens of every ſort of Plant he could find, with the Flowers; remarking which grew on hilly Ground, which upon the Plain, and which in Swamps or Boggs; likewiſe, he has obſerved the ſeveral Scituations of the Plants he gather'd, and has been as exact in remarking the ſeveral kinds of Soil they reſpectively grew in; whether they were Sandy, Gravelly, or inclined to Loam or Clay.

In the next place, when he gather'd the Seeds and Fruits, he was no leſs careful in ſetting down the Time of their Ripening, but chiefly was Curious in Learning from the *Indians*, and the Inhabitants, the Uſe of every Plant he collected, whether in Medicine, or for Diet, or for Dying or Staining of Colours, or for Fodder for Cattle, or for Timber. By which Method, we have not only by the Care of this worthy Gentleman, the Seeds of great Numbers of Curioſities brought over to us, which will agree well with our Climate; but when they grow with us, we ſhall be able to apply them to ſuch Uſes as may prove very beneficial to us.

Again, it is obſervable, that the great Varieties of Seeds and Fruits which he has brought over, were in their natural Caſes and Husks, ſo that they have not ſuffer'd by the Sea-Air in their Paſſage, but grow freely with us; which, had they been diſcharg'd of their Husks or Caſes before he had left the Country, they would without doubt have been ſo ſubject to the Sea-Air, that many of them would have corrupted, as it is commonly the Caſe with theſe Seeds brought from Abroad, without this Care. Therefore it is, that I adviſe every Curious Traveller to follow the above Directions; that ſuch Collections as happen to be brought over, may not only prove delightful to the Sight, but be render'd ſome way or other of Service to the Publick.

The End of the Firſt Part.

THE

CURIOUS and PROFITABLE

GARDENER:

BY

JOHN COWELL, of *Hoxton*.

PART II.

THE

CURIOUS and PROFITABLE

GARDENER.

CHAP. I.

Concerning the Aloe Americana, Folio in Longum Aculeum abeunte, *of* C. B. *or great* American *Aloe of* R. B. Dec. II. p. 1.

THERE have been ſo many different Accounts publiſh'd, of the Curioſities which bloſſom'd in my Garden, that a Stranger cannot be certain which of them is the beſt, or whether any of them are true. I am therefore deſired to publiſh my own Account of the Aloe and Torch-Thiſtle, as they really appeared, and give the Hiſtory of them, as I have received from ſeveral Gentlemen of the Royal Society, and other Perſons of Honour, as well as the Account I have receiv'd from a learned Gentleman of *Oxford*, relating to the *Glaſtonbury* Thorn, which is now in full Bud and green Leaf, flouriſhing as the common Thorn does in *April.*

I confeſs I had not time till now to ſet down to write, and put my Memorandums together, having been employed in deſigning Plans for Gardens, and laying out Grounds for Gentlemen; but as I am now favour'd with a Day or two's Leiſure, I ſhall give the Account as follows, beginning with the Great Aloe.

Of the large common American *Aloe, called by* Caſper Bauhine, Aloe Americana, Folio in Longum Aculeum abeunte; *or by Dr.* Bradley, *Common* American *Aloe*, Dec. II. p. 1.

THis Plant has been of a long Date known in *England*; even *Parkinſon*, in his Theatre of Plants, takes notice of it, who wrote in the Reigns of Queen *Elizabeth* and King *James* the Firſt.

The firſt that was brought into this Country came with Sir *Walter Raleigh*, and Sir *Henry Carew*, who likewiſe were the firſt Gentlemen who made Tobacco, and the Orange-Tree familiar to us.

At *Bedington* in *Surrey*, we ſee the Orange-Trees that were the firſt of the ſort, and planted in the Natural Ground, with a caſed Greenhouſe, to be put up over them in the Winter Seaſon. They are much the largeſt with us, and ſhoot very vigorouſly every Year, above three times as much as thoſe which we cultivate in Pots or Caſes.

Theſe Plants, as well the Orange-Trees as the Aloe, were, at their firſt arrival, put into a Pit, and covered in the Winter with Boards, as the late Sir *Nicholas Carew* told a Gentleman of my Acquaintance.

So long ago has the Great *American* Aloe been in *England*; and when we receive it under the Name of the *Perſian* Aloe, it is to be underſtood, that a Society of Floriſts named it ſo, according to their wonted Cuſtom in giving Names to every extraordinary Flower that is produced; and moreover as it was eſteemed a great Curioſity, in one of the Noble Gardens of *Perſia*, as ſome Merchants of good Credit aſſure us, it was thought as proper as any Name one might give an Auricula or a Carnation; ſuch as the Glory of *Hoxton*, the Glory of *Reading*, the Glory of *Windſor*, and ſuch like.

Another Sett of curious Men compared its Figure to *Moſes's* Candleſtick, as it is repreſented in the *Jewiſh* Hiſtory by *Joſephus*; or the famous branch'd Candleſtick, repreſented in the Draught of the Temple of *Solomon*:

and the Shape of both being ſo near alike, it was received and allow'd by many Spectators to deſerve that Name.

It muſt however, according to the Botaniſts, be allowed a Native of *America*, from whence it was firſt brought to *Europe*; and was ſo agreeable to the *Spaniſh* Climate, that it grows there in the Natural Ground, without any Shelter.

From *Spain* it was firſt brought into *France*, where it bloſſom'd about fourſcore Years ago, as a *French* Author has obſerv'd; he ſays, that the Plant call'd the *American* Aloe, was about 100 years old when it blow'd, and as a Friend of mine, who gives me his Account, takes notice, that *French* Author gave occaſion to the common Opinion, that the Aloe at the time of opening its Bloſſom made a Report as loud as a Cannon; but the Miſtake was by the Tranſlator, who explained the Words——*La Plante faiſoit une ſi grande bruit*, &c. which my Author ſays ought to be Engliſh'd, That the Plant made ſo great a *Noiſe* when it flower'd, that its Fame was ſpread over the whole Kingdom. This Conſtruction is allow'd by the Critics to be good, ſince the blowing of my Aloe has drawn ſo many thouſand Perſons to ſee it from all Parts of the Kingdom, and even from Foreign Countries, as well as the Compliments it has been paid by the *French* and *Dutch* News-Writers; which, by the beſt

Accounts, proves to be the ſame with that which flower'd in *France*, and of which kind alſo were thoſe which bloſſom'd in the Garden of Mr. *Verſprit* at *Lambeth*; the Gardens belonging to Prince *Eugene* near *Vienna*; the Garden belonging to his Grace of *Buckingham*, near St. *James*'s Park, and two others that flower'd in the Royal Gardens at *Hampton Court*.

The Aloe in Mr. *Verſprit*'s Garden at *Lambeth* was, as I am inform'd, the firſt that attempted to bloſſom in *England*, and is ſaid to come from one of thoſe that were brought hither in Sir *Walter Raleigh*'s Time; ſo that it might perhaps be a hundred years old when it puſh'd forth its Flower-Stalk, which was in the Reign of King *William* III. The Account I have of this Plant is, that it ſhot forth a long and large Stem about *Auguſt*, which branch'd like a Tree, and every Branch contain'd a large Cluſter of Bloſſoms and Buds. The Seaſon of the Year being towards a Time when Exotick Plants required Houſing, made Mr. *Verſprit* build a Glaſs Caſe on purpoſe for its Shelter; but either through the Fault of the Workmen, or the extraordinary high Winds which follow'd, the Glaſs Caſe was blown down, and the Flowering-Stem of the Plant broken from the Root. I muſt however take notice, that it was the extraordinary ſhooting of the Flowering-Stem, and the great Height it arrived to, made Mr. *Ver-*

ſprit build a Shelter on purpoſe for it, becauſe his Conſervatory would not hold it, as it then proceeded in Growth.

King *William* and Queen *Mary*, who cultivated the moſt Curious of Exotick Plants and Flowers in *England*, order'd a Draught to be taken by Mr. *Bogdane*, a famous Painter; ſome of which Branches painted, are now in one of the Royal Palaces.

The Traditional Account of Mr. *Verſprit*'s Aloe, is, that it was in its Stem about eighteen or twenty Feet high. The next Aloes which appear'd among us in Flower, were the two at the Royal Gardens in *Hampton-Court*, which came from the ſame Breed as the former; when theſe flower'd, they were in extraordinary Strength, even ſo great, that one of them brought five, and the other ſeven Stems of Flowers: every Stem branched like a regular Tree, and each Branch was loaded with Bloſſoms, which, as Dr. *Bradley* ſays, dropt Honey in abundance from every Flower. He further relates, that they laſted the greateſt part of the Winter in bloſſom, though they were not houſed; and even the Spring following attempted to make new Branches, though the Plants in their Leaves began to rot towards their Roots, and in their decaying State were thrown into the *Thames*; ſo that we do not certainly know what Appearance they would have made the Summer following. The talleſt of their Stems was about ſeventeen or eighteen Foot high, and the Leaves about five Foot long each, or rather more. Dr. *Bradley* told me, that the Aloes at *Hampton-Court* ſhot in their Stems about ſix or ſeven Inches a Day; but would have me make this difference between this Sort and the *Aloe Sobolifera* of Dr. *Comelin*, that the great *American* Aloe has Leaves of four or five Foot long, and the *Sobolifera* has Leaves of about a Foot in length at moſt.

It is remarkable alſo, that a young Plant of the great *American* Aloe is ſo like in Colour and Shape of the Leaf with that call'd the *Aloe Sobolifera*, that it muſt be a nice Judge to diſtinguiſh one ſort from the other. But we muſt obſerve, that the *Aloe Sobolifera* bloſſoms in nine or ten Years from a ſmall Offsett, and yet the Flower-Stem riſes near fifteen Foot in height, and brings Branches and Flowers nearly the ſame with thoſe of the great *American* Aloe; but with this remarkable Difference, that the *Sobolifera* has Cluſters of young Plants or Setts mingled with the Flowers: ſo that when the *Sobolifera* bloſſom'd in the Stove in *Hampton-Court*, which was about two Years after the great Aloes bloſſom'd, it was computed that there were not fewer than a thouſand young Plants mix'd with the Cluſters of Flowers. The Flowers of this are of the ſame Colour with thoſe of the great Sort; and the Flower-

Stem is near as big in one Sort as in the other; and is ſo quick in its growth, that by meaſure, it ſhot ſeventeen Inches high in Twenty-four Hours: but it had the aſſiſtance of a Stove, being a very tender Plant; while the great one is ſo hardy, that one of them has ſtood abroad ſeveral Years in the Garden of *Charles Dubois* Eſq; at *Mitcham* in *Surrey*.

I mention this, becauſe I apprehend that theſe two Sorts being ſo like in many Particulars, has confounded ſome Strangers in their Judgment of my Aloe, and that which bloſſom'd in the King of *Pruſſia*'s Garden; or has caus'd the two Kinds that bloſſom'd at *Hampton-Court*, to be miſtaken one for the other.

In the Year 1716, one of the large Sort of *American* Aloes, as Dr. *Bradley* informs me by Letter, bloſſom'd in his Grace of *Buckinghamſhire*'s Garden in St. *James*'s Park; but this had only a ſingle Stem about ſixteen or ſeventeen Feet high, branch'd like a regular Tree, and bearing ſuch Flowers as the two great Aloes did at *Hampton-Court*; but the Plant ſtood abroad, and died the ſame Winter.

A few Years after this, a Plant of the ſame Aloe bloſſom'd in the Gardens of Prince *Eugene*, near *Vienna*, which was ſtrong enough to bring ſeveral Flower-Stems, adorn'd with Branches and Flowers like thoſe at *Hampton-Court*. It was computed to be near a hundred Years old, and was accounted ſo extraordinary in its kind, that its Fame ſoon ſpread over *Europe*, the foreign News-Papers being fill'd with Encomiums of its Grandeur and Beauty.

About five or ſix Years ago, there was another attempted to bloſſom in the Right Honourable the Earl of *Caſtlemain*'s fine Gardens at *Wanſted* in *Eſſex*, but was unfortunately blown down ſeveral times by high Winds, which broke and bruiſed the Plant ſo much, that it did not live to bloſſom in its full Vigour, and make that fine Appearance which Nature had deſign'd it for. When that Plant decay'd, there were no more than nine Branches upon the Stem.

At length my own great Aloe began to open its Crown for flowering; that is, its central Leaf, or middle Spire, as ſome Gardeners call it, began to ſplit and crack, and the Centre of the whole Plant ſwell'd to a great degree towards the Spring of the Year 1729. And about the beginning of *June* following, the pointed Leaf in the middle of the Plant quite open'd it ſelf, and ſmaller Leaves appear'd, to the number of ſix or ſeven, which is a certain Mark of flowering; for this was obſerv'd on the 8th of *June*, and the Bloſſom-bud, or Stem bud appear'd above the Plant on the 10th of the ſame Month.

The Bud appear'd at its firſt ſhooting like the Bud of an Aſparagus, about thirteen or fourteen Inches in Circumference, and roſe gradually higher and higher, growing about ſeven Inches taller every Day at firſt, and afterwards about five or ſix Inches in a Day; decreaſing ſtill in its growth, as it arriv'd nearer to its intended Height; ſpreading into Branches as the Stem mounted, till the whole of the Flowering-Stem was twenty Feet high, and ſeventeen Inches in Circumference at the bottom.

This ſurprizing Growth of the Flower-Stem, and its Branches, was performed in about ſeventeen Weeks, and then was at a ſeeming Stand for about three Weeks more, while the Flower-buds were forming themſelves for Bloſſom.

The number of Branches ſpreading from this Stem were thirty, ſo gracefully diſpoſed, as to form the Figure of a Pyramid; at the End of each Branch was a Cluſter of Flowers, to the number of about a hundred and ten; ſo that by computation, the Plant had not fewer Bloſſoms upon it than three thouſand three hundred.

The length of each Flower, perfectly blown, was about three Inches, the bottom green, and the upper part yellowiſh; from the Centre of each Flower proceeded a *Piſtillum* about two Inches long, encompaſs'd by ſix *Stamina* and *Apices*, which projected about an Inch above the Flower. The *Apices*, when they open, are cover'd with a Duſt much yellower than the Colour of the Flower-Leaves; each Flower contain'd near a Tea-ſpoonful of ſweet Juice, like Honey, which riſe in ſo great quantity, as to overflow between the Petals or divided Leaf of the Flower.

I ſaved ſome of this Liquor in a Phial, which in a few Days became as fœtid to the Smell, as the Liquor freſh gathered was ſweet to the Taſte. The Seed-Pods are at preſent about two Inches long, very green on the outſide, and the Ovaries within them, like thoſe in the *Piſtillum* of the Tulip. I expect, if the Seaſon does not prove too ſevere, that I ſhall have ſeveral of the Pods ripen with me by *May* next.

In the mean while, it may be expected that I inform the Reader a little of the Hiſtory of my Aloe, and give ſome Account of the Culture of it, which has happen'd to be ſomewhat extraordinary.

Parkinſon, in his *Theatrum Botanicum*, ſpeaking of the great *American* Aloe, tells us, that it bears large long Leaves of a pale green Colour, whereon is to be ſeen an Eye of blue or aſh-colour, being of the length of a Man, and of two or three Fingers thickneſs in the main Parts, and dented about the Edges, where they are thinneſt, with hard ſharp Teeth or Thorns, and ending in a hard, round, and large blackiſh Thorn, as big as a Falcon's Claw or Talon. Which

Leaves are round on the under Side, and channell'd or made hollow like a Gutter on the upper Side, and at the bottom encompaſs one another. In the middle of theſe Leaves, after a long time abiding, riſeth a ſtrong, great, ſpongy Stalk, of the bigneſs of a Man's Arm, with a few ſmall dry and browniſh Leaves ſparſedly ſet thereon, and of the length of an Horſeman's Staff in ſome places, but riſing higher than two Spears length in others: As at *Avignon*, where it is reported, that within the ſpace of forty-five Days, the green Stem or Flower-Stalk grew to the height of twenty-two Hands breadth; and at the Grand Duke of *Florence*'s Garden about twelve Cubits length; and at *Rome* fifteen Cubits high, branched almoſt from the middle to the top into divers Branches, and each of them again into others; the great Branch ſtanding out for a good ſpace, and then turning upwards: On each whereof are ſet a good number of Flowers, even two or three hundred; being no other than long and large three-ſquare hard and green Husks, thruſting out ſix great yellow hard and crooked Threads, tipt at the top with yellow Pendants; and in the middle, amongſt them, another yellow round-headed Pointel. Theſe Flowers are of a whitiſh or yellowiſh green Colour, and ſomewhat of a ſweet Scent. The Husks that bear the Flowers, after they are dry, become the

Seed-Veſſels; which being ripe, are divided into three Parts or Cells, each containing abundance of Seed.

He further adds, that the Inhabitants of *Mexico*, where this Plant grows common, make many conſiderable Uſes of it; *viz.* That the mighty tall and ſtrong Flower-Stalks, being dried, ſerve for Fuel to burn, as well as the Leaves when they are dry. The hollow or channell'd Leaves of this Plant ſerve them inſtead of Tiles to cover their Houſes, and ſhelter them from Rain; which they can ſo well diſpoſe, that no other thing with them there can better perform that Office. Moreover, he tells us, that the Prieſts and Painters of thoſe Countries, uſe the Leaves to write and draw Figures upon, inſtead of Paper; which may well enough be done, while the Leaves are green, with a Pin or fine Needle, or with one of the ſharp Thorns growing at the Ends of the Leaves; which Spines are ſo ſharp-pointed and ſtrong, that they are uſed as Awles to make holes with in ſuch Bodies as are hard Subſtances; and that the Threads in the Leaf are ſtrong and uſeful to tie any thing with; and being ſpun, will make as ſtrong Thread as any Hemp can make.

Cluſius informs us, that while he was reſident at *Seville* in *Spain*, his Landlord's Daughter ſhew'd him Cloth made of the Threads of this Aloe, which ſhe had wrought into Shirts; but when the Strings of the Leaves were coarſer dreſt, they were platted together and made into Sandals, and alſo into Ropes and Cordage, and likewiſe into Matts for Floors to walk upon, and into ſhort coarſe Garments for Sailors, and ſuch like, who are much expoſed to the Weather.

Mr. *Darby*, my Predeceſſor, a famous Gardener, noted for one of the firſt in *England* who choſe the Culture of Exotic Plants, bought this Aloe of Mr. *Verſprit* of *Lambeth*; which was then of a conſiderable Size, as he ſaid to ſeveral of my Friends. He had it in the Garden where I now live about thirty-ſix Years, for he lived ſo long in *Hoxton*, at the Place which I now poſſeſs, and has affirmed it was the firſt curious Exotic Plant he ever had: One may therefore reaſonably conjecture he had it ſoon after his coming to the Place. Another Perſon, after Mr. *Darby*'s death, poſſeſs'd the Houſe about four Years; and then I bought the Leaſe, and the whole Stock of Plants, which I have enjoy'd above twelve Years. So that in all, one may compute the Plant, when Mr. *Darby* bought it, about twenty Years old, as he himſelf uſed to gueſs: It was in Mr. *Darby*'s hands about thirty-ſix Years, and about four Years in the hands of another Perſon after his death; which, with twelve Years I have had it in my poſſeſſion, amounts to ſeventy-two Years.

But I cannot paſs by obſerving a piece of extraordinary Management I had with it about five Years ago; when, by ſome accidental Bruiſe in the Shank of the Plant, the main Trunk of the Aloe, or, as one may call it, the Body of the Plant, between the Root and the Leaves, began to rot on one Side, and continued ſo to do till there was little room left of ſaving it. I then cut the Plant clear from the Root, and cut clean off the rotten part, laying the Aloe to dry in the Sun, that the Wound might heal and dry before I replanted it in the Earth. I prepared in the mean time ſome fine, free and rich dry Earth, into which I put the Aloe, and in a Month or two my Plant had ſhot Roots that almoſt fill'd the Tub; and from that time it began to grow vigorouſly, till at length it came to produce the Bloſſom I have deſcrib'd. But I am apt to believe, if my Plant had not been hurt, and I had not been obliged to have ſeparated it from the main Root, I ſhould have had the pleaſure of obſerving the Flower-Stem at leaſt 30 Foot high, or ſhould have had as many Flower-Stems, as appear'd upon one of the Plants at *Hampton-Court*. Thus far I have to ſay of my Aloe, unleſs I may add, that the fine ſtriped Aloe, which we have in two or three curious Gardens in *England*, is of the ſame kind with the great *American* Aloe; for I am inform'd, that the firſt Aloe with variegated Leaves, was taken from a large Plant of the plain ſort, which run ſtriped, in the *Heer Beaumont*'s Garden at the *Hague*: And Dr. *Bradley* informs me, that in the Year 1714, it was eſteem'd there at 500 Guilders Price; which, for that reaſon, I have had it engraved, as a Companion to my large Aloe.

I am deſired ſtill to make one Remark more, with reſpect to the Care I took of my Aloe when I perceived it coming to flower; I erected a Frame with Glaſs in the Front towards the *South*, keeping it open at the top till the Flower-Stem grew above it, and then raiſed my Building a Story higher; and as the Plant grew taller, continued to raiſe my Fabrick, till I perceived it was at its full Height, and then covered it in. I believe I may venture to ſay, that by this Method of proceeding, the Flower-Stem was ſome Feet higher than it would have been, had I left it expos'd to the open Air, as thoſe were which I have mention'd in the Duke of *Buckingham*'s Gardens, and at the Earl of *Caſtlemain*'s; for if we have a mind to draw the Flowering-Stem of any Plant in an extraordinary manner, we muſt confine the ambient Air from the Sides of the Stem, and let the Top of the Plant meet the open Air: which is the way we ſhould uſe in drawing the Campanula or Amaranths to an Height extraordinary. But I ſhall now proceed to relate the ſeveral Particulars, with regard to the uſe which is made of this ſort of Aloe in the Country where it naturally grows.

The Leaf of the Plant is ſo ſharp-pointed at the Extremity, and ſo full of Spines on the Edges, together with an uncommon ſtrength in it, that in the *Weſt-Indies* this Aloe is planted by way of Fence; and is ſo rude in its growth, that neither Man, nor Horſe, nor any Wild Beaſt, can paſs thro' or penetrate.

In a Climate ſo favourable as that is, where they are generally uſed in this manner, there is a continued Summer, which makes them grow as much in one Year, as the ſame Plant will do with us in ten, as ſeveral Gentlemen of great Worth have aſſured me; and it is not unreaſonable to think ſo, ſince a Peach-tree, from a Stone planted there, will bear Fruit the ſecond Year after ſetting or ſowing: and even in *Italy*, which is not ſo warm a Climate as where our Aloe naturally grows, a Peach-tree ſent from *England* has grown twenty Foot high in one Year. Which ſhews how much the Plants differ in ſeveral Climates; and particularly this is mentioned, becauſe ſome Merchants have affirmed, that in *Peru*, *Mexico*, *Brazil*, and ſome other Parts adjacent, the great Aloe bloſſoms in ten or twelve Years: but I ſuppoſe that theſe Plantations of Aloes might be made at different times, and ſo might produce Flowering-Stems from Year to Year, according to their growth or length of Life.

But it is ſaid, the *Aloe Sobolifera*, which I have mentioned before, is that Sort which comes from *Mexico*, and the hotter Climes; and it may not be unlikely that it may grow there, as well as our common Aloe, and then may, every now and then, be intermix'd with the others in Plantations. But we well know, from the beſt Travellers, that the great *American* Aloe grows not only on the *Mexican* Side, but in the more Northern and Southern Climates, where the Temper of Air is very moderate in its Degree, and where the Climate is ſubject to hard Weather in the Winter. This, I ſay, may have cauſed ſome Diſpute among the Judges that have taken my Aloe under their Conſideration.

But as I am now going to ſpeak of another Uſe which the great *American* Aloe is put to abroad, any one may judge, when they hear the traditional Account of the Aloe, that the great ſort was *Adam*'s Needle and Thread, it muſt be of a very different ſort from the *Aloe Sobolifera*. 'Tis indeed not a little merry to hear what is got into ſome People's heads about it, *viz.* that becauſe it has a ſharp Point at the End of the Leaf, and has fine Strings join'd to that Point, which run the whole length of the Leaf, it might ſerve, before Needles were invented, to ſew the Fig-Leaves together; but the *Sobolifera* kind of Aloe has not this Excellence in it, but is chiefly compoſed of a pulpy and juicy Body As I go along, I may take notice too, that, by Tradition, the *Jucca* is called *Adam*'s Needle; and that is an *African* Plant, and has not only a ſharp-pointed Leaf, but many Strings adhering to the Point: and if that really was the caſe, ſuch a Plant might be uſed in *Paradiſe* on ſuch an occaſion; for the Learned agree, that *America* was not known till *Columbus*'s Time, and therefore our Aloe could not be known in the firſt Times. But to diſcharge this Digreſſion, it is neceſſary to give an account further, how far uſeful our *American* Aloe is among the Moderns, with regard to the Silk or Thread that is taken from the Leaves.

The Threads which run thro' the Leaves are very fine, ſmall, and ſilken, of a fine white Colour, when they are well cleaned, ſo that a fine Point or Lace is made of them; and theſe Strings will bear dying of ſeveral Colours, as Dr. *Bradley* affirms, who informs me, that the preſent King of *Spain* had ſome white and ſome blue Lace or Point ſent by one of his Vice-Roys of the *Spaniſh Weſt-Indies*, and with theſe, ſome of the Silk or Thread fit for working; one ſort of the natural white Colour, and the other dy'd blue: Part of which Cargoe his *Spaniſh* Majeſty ſent as a curious Preſent to the late King of *France*, *Lewis* XIV. which Curioſity the King of *France* was pleaſed to communicate to the Royal Academy of *Paris*, and to his Profeſſor of Botany Dr. *De Juſſieu*, who gave Dr. *Bradley* ſome Specimens of each ſort, which he brought into *England.*

Since which time I have got ſeveral Purſes made of the ſame Aloe Thread, artful enough in their Work, tho' made by the *Indians*; and I deſign to have ſome curious Pieces wrought from the Threads I have dreſſed from the Leaves of my own Aloe, according to the Directions I have receiv'd from ſome Learned Gentlemen, who are acquainted with the genuine Way of preparing it.

The Method abroad of dreſſing the Leaves for Thread or Silk, is, according to an Account I have from *France*, and ſome other places, to cut the Leaves their full length, and lay them in Water till the pulpy Part rots, and then with Mallets to beat them, till the rotted ſpongy Part is quite diſcharged from the Fibres or Veſſels that make the principal Part of the Leaf. But if we beat the Leaf while 'tis freſh, we muſt waſh it in ſeveral Pails of Water, during the time it is under that Diſcipline; for the Juice of it freſh, has little leſs force than that of *Cantharides*, or *Spaniſh-Flies*: it will ſting the Hands and Face violently, where it happens to light; and was a piece of the freſh Leaf to be apply'd to the Hand or Foot, or any other part of the Body for a little time, it would raiſe a Bliſter on the Part where 'twas laid. The Liquor boil'd, as I am told, makes a Lee, or Lixivium, much more penetrating and pungent, than that of the Pot-Aſh and Pearl-Aſh. And I remember that a Friend of mine, who was indiſpos'd with an high Fever, was adviſed by a *Weſt-Indian* Gentleman to apply Pultices made of this Aloe Leaf bruis'd to his Feet and Wriſts, and in two days the Pultices raiſed many ſmall Bliſters on the Places where they were apply'd to. The Juice is certainly of a very warm Nature, and will take the Skin off the Fleſh, if one applies it for a day or two on any tender Part.

Another Inſtance I cannot forbear to mention, with regard to the pungent Quality in this Juice, *viz.* that a piece of the Leaf uſed as one would do a Spunge, or a Wiſp of Straw dipt in Lee, (or Lye) will ſcour Pewter better than any Lee that can be made; but no Perſon in my own Houſe, could bear the Torment with patience the next Day after their Work.

It would ſurely be well worth the while of ſome Chymiſts to try Experiments with it; for though the Leaves abound in Fibres, yet every Leaf will yield a good Quantity of Juice, ſufficient, as I am told by ſome Gentlemen of *Oxford*, to make any Experiment. They ſay too, that they believe it may be of uſe in diſſolving of Metals, and likewiſe that it will make a very ſtrong Cauſtic, much more fiery than any we have yet in the Shops.

When we dreſs the Leaves, we ſhall find the Veſſels, which are the Threads or Silk, not only running long-ways from the top Spine to the Root of each Leaf, but are join'd all the way with ſmall Fibres, about an Inch aſunder; ſo that the whole appears like a Caſting Net for catching of Fiſh, ſpreading, if we lay it out, about a Yard at bottom, and tapers all the way to the ſharp Point at the top. One of them I have now by me, prepared in this manner at the deſire of ſome Gentlemen of the Royal-Society, who admire the Doctrine of the Circulation of the Sap; which they ſay this confirms, by ſhewing ſuch Veſſels as are agreeable to Veins and Arteries in Animal Bodies.

When the Leaf is ſo far dreſs'd, a Comb muſt be uſed to it, and drawn directly downwards; which will diſcharge all the ſtraight Strings from the collateral Fibres, and ſo render them fit for working either Lace or Point. The Work of combing ſhould be often repeated, to make the Strings ſmooth and clean, and they may then be dy'd of any Colour.

The Strings of this Leaf, when they are more coarſely dreſs'd, are uſed to make Cordage and a ſort of Pack-thread, which the *Indians* weave into Hamocks, and will bear the Weather much better than Hemp. The

Indians alſo make Nets of it for taking of Deer, and catching of Fiſh; and, in ſhort, one may uſe it for any thing in ſuch ways, where Hemp and Flax are uſed; only we muſt obſerve, that the Works made with this will be ſtiff, unleſs they become wet.

Theſe Strings, which are from 3 to 5 or 6 Foot long, are of that Strength, that 'tis with great difficulty one can break one of them; and I conceiv'd therefore, that they would be of great uſe in angling to faſten Hooks to, and accordingly have had them try'd againſt the *Indian* Graſs, and ſtrongeſt Horſe-Hairs, but neither of them, I find, has half the Strength of the Aloe Silk; and for that reaſon, I have dierčted ſome of the Silk to be dreſs'd with Hooks, to oblige ſuch Gentlemen as are Lovers of Angling.

I ſhall conclude my Account of the Aloe, with a Remark or two, concerning a Conjecture which has been given me by a Virtuoſo, that my Plant is of the ſame ſort as that which is called the *Tree of Wonders* in *New-Spain*. The Account of it which I receiv'd, is taken in part from *Fr. Joſ. Acoſt. Nat. Hiſt. of the* Weſt-Indies, *Book* IV. *Chap.* 23. *p.* 254. It is ſaid there, " to afford " Water, Wine, Oil, Vinegar, Honey, and a " *Muſt* like new Wine; beſides Thread, " Needles, and many other Things. It is " therefore much valu'd in *New-Spain*, " where it grows wild, tho' it is alſo cultivated.

" The Leaves of it are broad and coarſe, " ending in ſharp ſtrong Points, which ſerve " either to be uſed as Pins, or to ſew with, " as one would do with a Needle. From the " Leaf they draw out Threads, which are " its Fibres. The Trunk or Body of the " Tree, being large when it is young, they " cut a Hollow in it, to which the Sap or " Moiſture riſes from the Root; and this " they drink inſtead of Water, being cool " and ſweet: but when this Liquor is boil'd, " it becomes like Wine; and letting it ſour, " it makes a good Vinegar: but being boil'd " to a Conſiſtence, is ſweet like Honey, and " being half boil'd, is like the *Muſt* above-" mention'd, well taſted and wholeſome, " and, in the opinion of the Perſon who " wrote this, much better than that made " of Grapes. So that according as the Sap of " the Tree is boiled, it produces ſeveral Va-" rieties of Liquors, and the Quantity the " Tree yields is great, producing ſeveral " Quarts a day for ſome time.

" The Wood of the Tree is ſpongy, and " ſerves to keep fire a long time, like the " Match uſed by Soldiers, or Touch-wood.

" It may well be called the *Tree of Won-" ders*, ſeeing that it produces ſuch a num-" ber of beneficial Things, as Thread and " Cordage, beſides the ſeveral Drinks men-" tion'd; which are the chief uſed in *Mexico*, " except thoſe which are brought from *Eu-" rope*.

" The common Drink is called *Pulque*,
" which is as ſtrong as Porters Beer. This
" is fermented with ripe ſmall Berries, which
" in three or four Days makes it brisk, and
" like Whey in colour: it is pleaſant to the
" Taſte, and keeps the *Indians* in health;
" and now pays to the Vice-Roy at *Mexico*,
" or to his Farmers, about 200,000 Pieces of
" Eight, or Forty Thouſand Pounds *Sterling*
" a Year Exciſe.

" This is brought to market in Hog-Skins,
" and ſold about the Skirts of the City un-
" der large ſquare Sheds, where the *Indi-*
" *ans*, both Men and Women, daily reſort
" to drink and be merry."

Thus far my Author. But the Gentlemen who are here from the Royal-Society, and both Univerſities, cannot allow that this is the ſame ſort of Plant which bloſſom'd in my Garden. For,

In the *Firſt Place*, this wonderful Plant is deſcribed to be a Tree, and very large, even ſo great as to yield Fire-wood; while my ſort of Aloe is an *Herbaceous* Plant, growing cloſe to the Ground, without any woody Part: and as it dies as ſoon as it has flower'd and produced Seed, can never afford any Wood; for it always flowers while the Leaves lie cloſe to the Ground.

Secondly, This is not the ſame ſort as my Aloe, becauſe the Juice of the *Tree of Wonders* is wholeſome to be drank, and the Juice of my Aloe is almoſt as corroſive as *Aqua fortis*.

Thirdly, If the Juice of my Aloe could be drawn from it by cutting, or inciſion, as they do the *Tree of Wonders*, or the *Birch-Tree*, it muſt have a large Stem or Trunk: but my Aloe has none, no more than any of the ſame ſort.

Fourthly, It is ſaid to produce Oil, which mine does not; nor Vinegar, becauſe my Aloe produces neither Wine nor any Liquor that one can make Vinegar of.

It ſeems therefore that it is not the ſame with my Aloe; but at the ſame time it is very reaſonably conjectured, that the Plant meant in the aforeſaid Hiſtory, is what is called the *Cocoa-Tree*, or elſe the *Wine-bearing-Palm*, or *Palma Vinifera:* for each of theſe ſeem to carry Principles with them, which anſwer the Character in the aforeſaid Hiſtory.

The Cocoa-Tree is ſaid by the *Indians* to carry in it Meat, Drink, and Cloth. When I ſpeak of this, I do not mean the Cacoa which produces the Seeds or Nuts that they make Chocolate of; but the large Nut-bearing Tree, which has a Nut ſo big, that a Quart of milky Liquor is contain'd in the Shell, beſides the Kernel or Nut itſelf. The Liquor is ſweet, freſh, and pleaſant, and the Nut good wholeſome Diet. The outſide of the Shell of the Nut is cover'd with Strings of a browniſh Colour, which one might weave into Cloths: But far more than this, the Leaves and Stem, or Trunk of the Plant, which grow to a vaſt Magnitude, afford Threads enough to clothe many more Men, than the Kernels, or Nuts, or Liquor can maintain.

The Leaves are likewiſe ſo full of Fibres, or Threads, that there is hardly any Pulp in them; and every Diviſion of a Leaf affords a ſharp Point at the Extremity, ſo that they may well enough ſerve as Needles and Thread.

The whole Bark and moſt woody Part conſiſts of Veſſels or Strings; which, being combin'd, make a ſort of ſpongy Wood. This will burn, when dry, in a tender manner like Touch wood: And if we do not uſe it for Firing, may be beat and dreſs'd like Hemp, and will yield a Thread fit for Cordage and coarſe Cloth.

If we tap or wound the Stem of this Plant, the Juice of it will flow ſo plentifully, that a good Liquor will iſſue from it in great quantity, as it does from the Birch-Tree;

and as it firſt comes from the Tree, will be a kind of wateriſh Juice; but when boil'd, more vinous; and more boil'd ſtill, will become like Honey.

But particularly, the Wine-Palm has a Juice in it of a very extraordinary Nature, and is called the *Palma Vinifera* on that account. Some *Dutch* Merchants inform me, there is one of theſe Plants in the *Amſterdam* Gardens, brought from *Curaſao* or *Surinam*.

All the Palms are obſerv'd, by Travellers of the beſt Credit, to grow very tall, and have moſt of theſe Excellencies: The Liquor of one is either in greater Perfection than another, or in greater Quantity. And as for the Leaves, one ſort perhaps is a little more fitting for Clothing than another; but in the main, they all carry the ſame Principle.

I have now only to add, that my Aloe has been miſtaken by many who have obſerv'd it; and as I had Crowds of People of the moſt curious ſort, as well as the moſt noted Travellers to ſee it, I judged it beſt to leave my Deciſion of the matter till I had received their ſeveral Opinions of it: And I gratefully acknowledge the Favours I have receiv'd from many of the Ingenious, concerning ſeveral Particulars, which relate to its Hiſtory.

As I am a Gardener, it is expected I ſhould add ſome proper Directions for the

Culture of this ſort of Aloe; which I find is the moſt hardy of any of the *American* ſorts, therefore requires no more than common Shelter in a Green-houſe during the Winter-Seaſon, and in that time ſhould have very little or no Water: and ſpecial Care muſt be taken, that we keep the Crown or Center of the Plant free from Wet; which, if any ſhould lodge there, the Plant will be in danger of rotting.

If we have a mind to make the Plant ſhoot large Leaves, and grow vigorouſly, we ſhould every Spring give it freſh Earth towards the Surface of the Pot or Tub, obſerving to keep the Leaves as free as poſſible from touching it, and let it have room enough to ſpread its Roots freely.

The beſt ſort of Caſe for this Plant when it grows large, is a ſquare Box, ſo made, as to open on every ſide, that one may more eaſily give it freſh Earth, and examine the State of the Leaves on the under ſide. The Earth the moſt proper for it, ſhould be light, and finely ſifted.

But if we would have it increaſe plentifully, then the Roots muſt be confined in a narrow compaſs, and the Plant kept dry: It will then fling out abundance of Off-ſets; which being taken off, and tranſplanted into Pots of freſh Earth, preſently grow. I mention this particularly, becauſe the Aloe of this kind, whoſe Leaves are finely edged with Cream-colour, may be managed by the ſame Method. The beſt time of tranſplanting the Off-ſets is from *April* till the end of *July*.

But I cannot part with this Subject, without taking notice of a deteſtable piece of Malice and Abuſe that was offered me when this Aloe was flowering in my Garden, and gave me the faireſt Proſpect of poſſeſſing an eaſy Fortune for my Life, from the vaſt Concourſe of People that daily reſorted to my Houſe to ſee it.

When the Aloe was in ſo great Perfection, as to invite more Company than my Houſe and Garden could well contain, and the laſt Flower of my Torch-Thiſtle was opening; three Men, habited like Gentlemen, were inadvertently let up to ſee it: who no ſooner were come to the Plant, but one of them began to break off the Buds; and being deſired to deſiſt, took hold of the main Stem, and endeavour'd to break it by violence; but it was luckily, much too ſtrong to give way to their baſe Intent. This their Attempt was ſoon diſcover'd by all the Gentlemen and Ladies in my Garden, and I was call'd to the Aſſiſtance of my Servant, and to ſave my Plant from the fury of their Rage: When immediately one, who was on the top of the Stair-caſe in my Aloe-Houſe, being intreated by me to come down, fell a ſwearing, and drew his Sword upon my

Man, telling him he would run him through the Body if he offer'd to aſſiſt me; and in the mean time kick'd me on the Head while I offer'd to go up, while another at the bottom of the Stairs, one of his Companions, pull'd me by the Legs; and a third of them wounded me with his Sword in two places of my Neck, ſo that I was under the Surgeon's hands many Weeks, devoid of attending the curious Perſons that did me the honour of coming to my Garden; which was one Diſadvantage. And moreover, the Violence I had receiv'd, occaſion'd all the good Company that were ready to ſee my Curioſities, to leave my Garden; to the great Loſs, not only of the Money I might have gain'd, but, I fear, that noble Company might be diſobliged. I am the more particular in this Account, that I may have an Opportunity of acquainting that worthy Aſſembly throughly of the Caſe; and to inform the World, at the ſame time, that I have proſecuted the Perſons that committed the Riot; notwithſtanding one of them ſaid he was offer'd to be put in the Commiſſion of the Peace two or three Months before; and would now accept on't, that he might have an occaſion of deſtroying my Aloe, and ruining my Houſe. But 'tis our Happineſs, that the Government has ſo much Wiſdom as not to admit of ſuch baſe, ungenerous

People, to be the Diſtributors of their Juſtice. I beg leave to ask,

Is ſuch Treatment allowable in Reaſon, or does it not appear to be malicious, when Men clandeſtinely endeavour to deſtroy the Goods of a Man who has got them honeſtly, and has ſhew'd himſelf with Good-nature to all Mankind?

Do not ſuch Actions carry the face of Folly with them, (to make the beſt Excuſe) to inſult a Man in his own Houſe, whom they never had ſeen before? One might have expected ſuch Treatment from a Mad-man.

Is it not the Character of Men of baſe Principles to act Cowardly? and when they have a ſuperior Power, or undeſerv'd Weapons in their Hands, to attack a Man unarm'd?

Is it not Villanous to deſtroy, or attempt to deſtroy a Man's Eſtate? Common Robbers endeavour to get Money to ſupport themſelves by Robbing, but ſuch would ruin other People out of pure *Ill-nature*. However, they have paid pretty well for that; and I hope they will be *better Men*, or *good Boys* for the future, and not run ſuch Lengths as may bring any of them to a villanous End.

I leave theſe my Sentiments to be conſider'd by the true Gentlemen, and appeal to them, whether ſuch Tranſactions can be allow'd warrantable by thoſe who are Generous enough to be Juſt?

CHAP.

CHAP. II.

Of the Torch-Thiſtle; *call'd* Cereus erectus maximus Americanus Hexangularis, Flore albo radiato: *or, Great upright* Torch-Thiſtle *of* R. B. Hiſt. Plant. Succ. Dec. I. p. 1.

THIS Plant, as the Name informs us, comes from the *American* Quarter; but more particularly the Merchants trading to *Jamaica* and *Barbadoes*, as well as all the Natives, know it by the Name of the Dildo-Tree. But moſt of our *European* Botaniſts call it Torch-Thiſtle, from its ſtrait manner of diſpoſing it ſelf like a Torch, or rather from its appearance like a Taper or *Flambeaux*, which has ſeveral Diviſions on the Sides, as a fluted Pillar has in Architecture; and from the Thorns or Spines which are commonly found on the edges of the Plant, that are ſharp like thoſe on the Thiſtle, makes it bear this Name.

There are many Sorts of this Plant in *America*, every one of which are much more tender than this, and therefore require the warmeſt Stoves to keep them alive in proſperity. But this will ſtand abroad all the Summer, that is, from the middle of *May* to the middle of *September*; and then need no other Shelter but a common Green-houſe, where Froſt cannot enter.

Of the *Cereus* or Torch-Thiſtle there are ſome which conſtantly ſhoot upright like Pillars, and others that either creep up Trees, or run upon the Ground; but none of them ever produce any Leaves, but Stems only beſet with Thorns, till they come to flower, and then the Fruit-part ſwells to near its full growth, before the Bloſſom opens at the Head of it; which makes ſome Authors reckon this Tribe of Plants very nearly related to the *Opuntia,* or *Indian* Fig; or, as the Natives of *America* call it, Prickly Pear; which always has its Fruit full grown, before the Flower opens at the top of the Fruit. But it is obſervable that the *Opuntia* or *Indian* Fig, as many as I have ſeen of them, open their Bloſſoms in the Daytime; while all the Torch-Thiſtle Kind, that I know or have heard of, open their Flowers in the Night; as I ſhall explain by and by.

But the *Cereus* or Torch-Thiſtle which blow'd this Year, *An.* 1729. I muſt now deſcribe, as well as give the known Hiſtory of it.

The firſt of this Plant that was in *England,* was in the Gardens of the late Right Reverend Father in God *Henry Compton*, Lord Biſhop of *London*, at *Fulham*; which was then eſteem'd one of the greateſt Curioſities in the Kingdom. It was, at its firſt appearance with us, of ſo ſurprizing a Make, that the Curious from all Parts were invited to ſee it. And as I am informed, the Seed of it was ſent to his Lordſhip from *Barbadoes*, which was ſo carefully manag'd, that it ſoon arriv'd to a good height; but ſtill with one ſingle Stem, without hopes of yielding any Branch to make a young Plant of, or the leaſt appearance of an Off-ſet: Till at length it was concluded that it would grow from Cuttings, like other Succulent Plants, and therefore the Plant was cut into ſeveral pieces about the end of *May*; and after each part had been expoſed to the Sun for ſome few Days, they were replanted, and proſpered.

The very top of all grew ſtill upright without branching, but the other Pieces having no leading Tops, broke forth into ſmall Heads, about four or five a-piece; and the lower part of the Plant, next the Root, did as much: ſo that the Year following there were capital Cuttings enough to raiſe many Plants from.

By this means the moſt curious Acquaintance of his Lordſhip became furniſh'd; and about twenty Years ago, my Predeceſſor, Mr. *Darby*, got into the Sort, and raiſed the large Plant which I now have, as well as many others which he ſold, that are now as tall as moſt in *England*. One or two of which have flower'd where they were well taken care of; but where they have been neglected, they appear of a pale yellow Colour, and give a poor Reſemblance of the Plant, though they are tall. In ſhort, they will not flouriſh without they enjoy a freedom of Air when the Weather is temperate, and have Pot-room enough, and are treated once a Year with freſh Earth. And this, as I am told, is the hard Caſe of thoſe in the *Amſterdam* Gardens, which were kept confin'd all the Summer in a warm Stove with the Coffee-Trees, where they can enjoy but little Benefit from the Air. Theſe are ſaid to be ſeveral Years older than any in *England*; and it may well be ſo, ſince they ſay thoſe Plants are a great deal more than twenty foot high; but I hear they are very weak, and have never bloſſom'd.

In the mean time, I was acquainted by ſome Gentlemen of the Royal Society, who have ſeen the great Plant of this ſort in the King of *France*'s Phyſick-Garden at *Paris*, that the *Cereus* there is much the largeſt in *Europe*, being now between twenty and thirty Feet high, and growing in the natural Ground, under a South Wall, and cover'd with a Glaſs Caſe. But this Plant would have been much taller than it is, if there had been opportunity of raiſing the Glaſs-Caſe higher ſome Years ago. But as there was

nor,

not, without injuring ſome part of the Garden behind it, by its Shade; the top of the Plant was cut off, and then the Body ſhot out ſeveral Branches or freſh Stems, and produced Flowers from year to year.

As for the Plants of the *Cereus* that flower'd in my Garden at *Hoxton*, they were about eight Foot high each, and were in the moſt vigorous growing ſtate that ever I had ſeen any. The Thorns in ſome places on their Edges renew'd themſelves, the principal or leading Thorn of the Cluſter ſhot forth longer than uſual, and appear'd more tranſparent than ordinary; and where that ſhow'd it ſelf, one might obſerve at the bottom or Root of ſuch clump of Thorns a ſmall ſwelling, ſeemingly cover'd with a ſmall and green Moſs. To compare ſuch a knot of Thorns with the others that are not deſign'd for Bloſſom that Year, you will find a great deal of difference. A nice Judge may know the Midſummer before, what will bloſſom the Year following; and by the number of ſuch Knots, may know how many Bloſſoms will be upon each Plant; for there never is more than one Bloſſom proceeds from a Knot of Thorns.

My Plants which flower'd, began in *June* to bud, or put out their Bloſſom-buds; and before *July* was ended, began to open their Flowers, after the Fruit-part had made its full growth, like the Fruit of the *Indian* Fig.

It is remarkable that the Flowers did not open like as other Flowers of Plants commonly do in the Day-time, but began only to diſplay themſelves about Sun-ſet. About Seven in the Evening the Bloſſoms began to open, and about eleven or twelve the ſame Night were quite open, and in their full luſtre. During their opening, one might eaſily obſerve the motion of the Apices or Pendants in the Body of the Flower, cracking or breaking, and flinging out their Duſt, (by means of a Microſcope.)

The Flower, when it was open, was about four Inches over, conſiſting of Flower-Leaves, diſpoſed like a Star, or thoſe of a Sun-Flower; but as the Leaves of the Sun-Flower are yellow, the Leaves of my *Cereus*-Flower were white, and tipt with a Peach bloom-colour, while the Tendrels or Threads in the middle were yellow. I ſuppoſe, that from ſome of my Men, the Perſon who publiſh'd the ſpurious Copy of my *Cereus*, took a hint that the *Cereus*-Flower was yellow, and therefore fram'd an Imaginary Plant from thence; becauſe, I obſerve, the Flowers of the *Cereus* he has painted are all yellow. It is for this Reaſon I have publiſh'd my great Aloe and this *Cereus* in Bloſſom, with other curious Plants that were in my Garden, in their proper Colours, that the Curious may be no longer impos'd upon.

About Sun-riſe the next Morning the Flowers began to ſhut up, and before Eight were quite cloſed ; declining daily for near a Fortnight, and then dropp'd *.

It is reported, that in the *Weſt-Indies*, where they grow naturally, the Fruit, when it is ripe, is of a red Colour, like the Fruit of the common *Opuntia* or *Indian* Fig.

The flowering of this Plant in the Night, with us is ſomewhat ſurprizing ; but all the Sorts of *Cereus* do ſo, and two Sorts of *Ficoides* ; ſome Kinds of *Convolvulus*, and two or three other Plants : which make ſome believe, that theſe Night-flowering Plants with us, are originally bred in ſuch parts of the World where the Day is in the time of our Night, and ſo are conſtant to their time of opening their Flowers, let them be where they will. But 'tis a Caſe which requires a great deal of Conſideration to determine, and I ſhall leave it to the Learned to conſider.

We may ſay of this *Cereus*, that it is the moſt hardy of all others, for it will proſper very well in a common Green-Houſe ; whereas all the other Varieties I know of, muſt have hot Stoves in the Winter, and will bear very little of the Sumer Air abroad. We have ſeveral other Kinds in the *Weſt-Indies*, which grow upright like this, but have ſome more, ſome fewer Angles, differing in their Colour, and in the manner of bearing their Spines, and the Length and Colour of them. About *Nevis*, *St. Chriſtopher's*, *Jamaica*, and Iſlands thereabouts, there are moſt of the ſorts to be found, as well as in an Iſland ſomewhere thereabouts, called the Iſland of *Mona*, uninhabited ; but by the Account of ſome who have accidentally touched at it, abounds with Rarities of theſe kinds. It could be wiſh'd, that thoſe who know that Iſland, if they happen to come near it, would examine what there was upon it : for beſides the odd things my Friends obſerv'd growing there, they found a great Variety of Oranges and large Fruits, which were exceeding pleaſant, and refreſhing to them.

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* The Right Ones may be had of *Weaver Bickerton* and *Richard Mountague*.

It is remarkable, from the beſt Accounts, that every ſort of *Cereus* brings a different-colour'd Flower, and as different Fruit from one another in Taſte and Quality, as any Tribe of Plants we know.

But we have ſome ſorts of *Cereus* which creep upon the Ground, and run up Trees; ſuch as the triangular *Cereus*, deſcribed and figured in *Piſo* and *Margrave*'s Book of the *Brazil* Plants: this is there figured with its Flower ; and as one meets with the ſaid Book colour'd in ſeveral Libraries, ſaid to be done by the Authors, it appears that the Flower is blue. We have had of this ſort many Years in *England*, but without ſhewing any Flower; notwithſtanding there are Plants of it now not leſs than fifteen Foot in length, in the Stoves at *Hampton-Court*.

It is the Nature of this Plant to ſhoot out Roots plentifully from every Leaf, if one may ſo call it; tho' we commonly train it up a Stick: even theſe Roots ſhoot from the upper Shoots, tho they are 15 Feet above ground, and all of them aiming to reach the Earth, make the Plant look as if it was covered with a coarſe piece of Net-Work; but if the Plant ſtands near a Wall, theſe Roots faſten themſelves to it: which one obſerves at *Hampton-Court*, the Plants there of this ſort ſpreading their Roots on the top upon the Ceiling; which plainly indicates that the Plant ſhould run upon the Ground, that it might ſtrike Root as it puts forth its Shoots. For this end, Dr. *Udall* of *Enfield* had contrived, a little before he died, to train them in long Troughs, with hopes by that means to bring them to flower; which ſeems to be the righteſt way of proceeding, as it follows Nature. I doubt not but if the Plaiſter of the Ceiling in *Hampton-Court* Stoves was not too hard to receive the Roots throughly, this Plant would have bloſſom'd there long before now. I am particular in this, that thoſe who chuſe to cultivate this Plant in their Stoves, may give them Troughs inſtead of Pots, that they may have the pleaſure of obſerving the Flower, and gathering the Fruit, which is ſaid to be very pleaſant both to the Eye and the Taſte. The Soil for this will bear a good ſhare of Rubbiſh of Houſes in it, and requires very little Water, as well as the other tender upright ſorts: But the annex'd Figure will give my Reader a more perfect *Idea* of it.

It is obſerv'd by the Gentlemen who have ſeen this Plant growing in the *Weſt-Indies*, that it ſometimes runs up Trees, and takes hold of them, by ſhooting their Roots into the Bark: and alſo that ſome Plants of this ſort ſhooting on the Ground, are above an hundred Foot long.

Another *Cereus* we have in our Stoves of a creeping kind, which ſeems to be figured by *Parkinſon*, under the Name of the *Star-Thiſtle* of *America*, or the *Latin* Name he gives it, *Planta Pinnata Spinoſa*. The ſame ſort is alſo figured in the *Paradiſus Batavus*, but without a Flower. The Stalks of it are about the Thickneſs of a large Reed, and are channell'd ſo, as to ſhew ſix Ribs or Angles, ſet on the Edges with ſmall Knots of white Thorns. The Stalks are of a purpliſh Colour when they are in health, and ſhoot out of one another like the reſt of the *Cereus* Tribe, ſhooting out Roots from the Sides, like the triangular ſort above-mention'd, and ſhould be treated in the ſame manner to run in Troughs. We have this Plant pretty frequent in our Stoves, but 'tis generally too much drawn for want of Air; and the Shoots are ſo weak, that they look of a pale Green, and bring no Flowers.

I am told it bloſſom'd at *Hampton-Court* in King *William*'s Time, and that there is now a Specimen of the Flower dry'd. When it bloſſom'd, the Plant had no Earth to ſubſiſt from, nor any Nouriſhment but what it drew by its Roots that grew into the Wall of the Houſe. The Flower is about four Inches over, and opens in the Evening like the reſt, yielding a ſtrong Scent like Jaſmine. The Flower is ſhaped like a Star. The ſame ſort bloſſom'd lately at Mr. *Sherrard*'s, at *Eltham* in *Kent*.

⁂

CHAP. III.

Of the Glaſtenbury Thorn, *or* Holy Thorn, *or* Spina Acuta Biflora Britannica, *of* Parkinſon.

THIS Plant has been for many Centuries in great eſteem among the Religious, for its extraordinary budding and flowering at *Chriſtmas,* as well as in *May*, in a natural way, like our common White-Thorn. The Story is ſo remarkable, and ſo well receiv'd by thoſe who are ſtrictly religious among the Roman Catholicks, that there is not a Year paſſes but many of them make a kind of Pilgrimage to *Glaſtenbury*, to ſee the great Plant there bloſſom and bud on *Chriſtmas-Day*; at which Seaſon it ſurely ſhews its Flowers and Leaves, as I know for certain, from a Plant which I have had of it many Years in my own Garden, and never fails flowering at that time of the Year, tho' it ſtands in one of the moſt ſhady Places of my Ground, and even though the Weather is ever ſo ſevere.

This Plant, many Authors of good Credit tell us, was brought into *England* by *Joſeph* of *Arimathea*, a Senator of *Judea*, and a Diſciple of Chriſt, who begg'd the Body of his Saviour from *Pilate* after the Crucifixion,

fixion, and wrapt it in fine Linen, and laid it in his own Sepulchre. The Hiſtory farther relates, that the Plant which is now ſo famous, was brought over by the ſaid *Joſeph* of *Arimathea* as a Staff; and that upon his firſt landing in *Britain* to preach the Goſpel, he ſet his Staff in the Ground, and it grew there, and budded and bloſſom'd on *Chriſtmas-Day*; and that Plant, and others which have been propagated from it, have continued to do ſo ever ſince.

The extraordinary flowering of this Plant at ſo cold a Seaſon, was undoubtedly no ſmall means of helping St. *Joſeph*, and the other Diſciples that came with him, to propagate the Chriſtian Faith, as well as the extraordinary Vegetation of the Staff, which the People thought was no more than a dead Stick when he brought it over. And at that time of day we muſt likewiſe obſerve, that the People of *Britain* were under the Tuition of a Sett of Wiſe Men skill'd in the *Ægyptian* Learning, call'd *Druids*, who at the ſame time diſpenſed Religion and Phyſick under the Oak, which was the Temple of *Saturn*, whom they worſhip'd: So that without a miraculous-like Beginning, it would have been difficult for St. *Joſeph* to have ſet aſide the ſuperſtitious Bigotry the People had then for the Worſhip of their God *Saturn*, and the Adoration they paid to his Prieſts the *Druids*, who kept them in the greateſt Awe, and under the greateſt Subjection: For it ſeems by the Accounts which I have received from ſeveral Gentlemen of Learning, that whoever of the People were not Obſervers of the Doctrine deliver'd them by the *Druids*, muſt never hope for any Advantage from their Phyſick, or any Remedy, though they ſuffer'd under the moſt grievous Maladies. And theſe Gentlemen tell me, that ſome Writers have conjectur'd from ſome Relations of thoſe Times, that the *Druids* were not a little famous for poiſoning, and giving ſuch as had offended them tormenting Draughts, and pernicious Diets, in order to bring them to their Obedience.

Theſe Severities of the *Druids* over their People, did not perhaps help a little to the furtherance of St. *Joſeph*'s Deſign of propagating the Chriſtian Faith, which was eaſy, humane, and conſiſting of good Morals; ſo that in a ſhort ſpace theſe Diſciples of Chriſt had many Followers, as a worthy Gentleman, my Correſpondent, informs me.

I ſhall have occaſion to ſay more of the *Druids* and their Worſhip in another place, from an Account I have received from an extraordinary Antiquary; but, in the mean time, ſhall give my Reader ſuch a Relation of St. *Joſeph*'s coming into *England*, as I have receiv'd in a Letter from a curious Gentleman of *Oxford*.

To Mr. Cowell, *Gardener at* Hoxton.

SIR, *Oxford, Jan.* 18, 17$\frac{29}{30}$.

‘ I Have heard ſo much of your Curioſities in the Aloe and Torch-Thiſtle, but eſpecially your Holy Thorn, or *Glaſtenbury* Thorn, that I venture to write to you, tho' unknown, upon the account of the latter. As my Study has led me particularly to ſearch into Antiquities, I believe the following Account may not be unacceptable to you, how *Joſeph* of *Arimathea* happen'd firſt to come into *Britain*.

‘ You muſt know that the Diſciples of Chriſt, ſoon after the Death of their Maſter, by conſent choſe their ſeveral Routs or Journeys, to preach the Goſpel in the then known Parts of the World.

‘ *Nicephorus*, a *Greek* Author, tells us in his ſecond Book, Chap. 40. that *Simon*, born in *Cana Galilei*, was ſo fervent in his Love for his Maſter, and his Zeal for the Goſpel, that he was ſirnamed *Zelotes*. He travell'd through *Egypt* and *Afric*, then through *Mauritania* and *Lybia*, preaching the Goſpel, and the ſame Doctrine he brought to the Weſtern Sea, and the Iſles call'd *Brytaniæ*, &c.

‘ In his third Book, Chap. 1. he tells us, that the Apoſtles diſpers'd themſelves over the Face of the whole Earth; which was

‘ then confined to *Aſia*, *Africa*, and *Europe*, ‘ for *America* was not at that time known.

‘ In the Diſciples Diviſion of the then ‘ known World, which they appointed and ‘ regulated by Lot or Ballot, the Apoſtles fill'd ‘ with the humane, generous, and ſovereign ‘ Doctrine of Chriſt, free from Deceit or De‘ſire of worldly Lucre, ſet forward to preach ‘ the Doctrine of their Maſter, thro' Coun‘tries unknown, and beſet with every Diffi‘culty that could attend human Life.

‘ St. *Peter* firſt preach'd the Goſpel at ‘ *Jeruſalem*, and then in *Galatia*, *Bythinia*, ‘ with the *Upper Aſia*, *Cappadocia*, and in ‘ *Italy* alſo taught the Goſpel.

‘ St. *John* in *Aſia*, and ended his Life ‘ there.

‘ To St. *Andrew* fell the Provinces about ‘ the *Euxine Sea*, all *Scythia*, *Byzance*, *Ma‘cedonia*, and *Greece*.

‘ St. *Thomas* preach'd Chriſtianity among ‘ the *Parthians*, *Indians*, and in the Iſle of ‘ *Taproban*.

‘ Another choſe *Egypt* and *Lybia*; and ‘ another would go to the uttermoſt Coaſts ‘ of the Ocean, with the Iſles of *Bryttaine*.

‘ *Dorothius* tells us, that *Simon Zelotes*, ‘ paſſing through *Mauritania* and *Africa*, ‘ preaching the Doctrine of Chriſt, was at ‘ length crucify'd and bury'd in *Bithanea*; ‘ or, as ſome would have it, *Brytania*.

‘ He alſo tells us, that *Ariſtobulus*, whom ‘ the Apoſtle to the *Romans* mentions with ‘ great Veneration, was made a Biſhop in ‘ *Brytaine*, or *Bithania*.

‘ *George Major* tells us in his Preface, that ‘ immediately after Chriſt's Reſurrection, in ‘ the time of *Claudius* the Emperor, the ‘ Light of the Goſpel was kindled in *Britain* ‘ by *Joſeph* of *Arimathea*, that bury'd the ‘ Body of Chriſt.

‘ *Tertullian*, when he wrote againſt the ‘ *Jews* of thoſe Times, tells us, that the ‘ *Britains*, Inhabitants of Places unknown ‘ to the *Romans*, were yet obedient and ſub‘ject to the Kingdom of Chriſt.

‘ *William* of *Malmsbury*, in his Book of ‘ the Antiquities of *Glaſtenbury*, aſſures us, ‘ that *Frecuphus* affirms, in the fourth Chap‘ter of his ſecond Book, that *Philip* the ‘ Apoſtle preaching the Word of God in ‘ *Gaul*, which is now called *France*, choſe ‘ out twelve of his Diſciples, whom he ſent ‘ into *Britain* to preach the Word of Life: ‘ He appointed over theſe as Chief, *Joſeph* ‘ of *Arimathea*, his dear Friend, that bury'd ‘ our Lord.

‘ Theſe, according to *John Capgrave*, who ‘ brings *Milkin* and *Merlin* for his Vouchers, ‘ came into this Land in the Year of Chriſt's ‘ Incarnation 36, in the time of *Arviragus*, ‘ who gave to them the Iſle of *Avalon*, ‘ where they built an Oratory of Wrythen

‘ Wands or Boughs, which was the firſt Chri‘ſtian Church, if one may ſo call it, that ‘ was erected in *Britain*. We find this Cu‘ſtom was follow’d in the firſt Times, in ‘ building the Chriſtian Churches in *Britain* ‘ of Boughs; as an Inſtance, Bow-Church or ‘ Bough-Church at *Dureſm*, which was ſet ‘ up by the Monks or Diſciples of Venerable ‘ *Bede*, was built of Boughs of Trees, I ſup‘poſe to imitate in ſome meaſure the Tem‘ples of *Saturn*, which were always kept un‘der the Oak. And as every one of the Hea‘then Deities had their favourite Tree, ſo the ‘ ſeveral Worſhippers of them, choſe the fa‘vourite Tree of their God as a Temple to ‘ worſhip him in. And the Diſciples of Chriſt, ‘ perhaps, might chuſe this way of making ‘ their Temples, that the People at once ‘ might more eaſily come over to them; be‘cauſe the Chriſtian Temples, being made of ‘ Boughs of Trees, were not altogether diffe‘rent from thoſe allotted for the Worſhip of ‘ *Saturn*, and the other Heathen Deities.

‘ Again, it is remarkable with regard to ‘ the Oak, which was *Saturn*’s Temple, that ‘ in *December*, which is the Month in which ‘ we commemorate the Birth of our Lord, ‘ the Oak is vacant of Leaves, or, at beſt, ‘ they are dry and dead at that Seaſon; but ‘ as the great Feaſts of *Saturn* were held in ‘ that Month, the Druids, as a learned Au‘thor reports, obliged the People to bring

‘ in Boughs and Sprigs of all the Evergreens ‘ they could find to adorn and cover it. And ‘ the Diſciples of Chriſt might very likely ‘ follow that method in covering their Temples at *Chriſtmas*, that the People might ‘ not too ſuddenly part from all their Ceremonies, but be brought by degrees to the ‘ Chriſtian Faith : Which Reaſon teaches us ‘ could not ſo ſoon have been brought about, ‘ if every Cuſtom the People had been uſed ‘ to, had been forced from them at once. ‘ But the Chriſtian Religion is the Religion ‘ of Good-nature, and does not allow of Perſecution. I am apt to think that the Cuſtom of adorning our Churches at *Chriſtmas*, as well as our Houſes with Evergreens, proceeds from what has been related.

‘ But to return to *Joſeph* of *Arimathea*, ‘ and his Diſciples, we learn from *Milkin* ‘ and *Merlin*, that in the Place where they ‘ built their Oratory, they were bury'd: ‘ Which Place being ſince encreas'd, and ‘ newly builded, (as thoſe Authors relate) ‘ by divers Princes was called *Glaſtenbury*. ‘ For Confirmation of which, King *Henry* ‘ the Second, in a Charter granted by him, ‘ affirms that he had diligently peruſed the ‘ Privileges and Charters of *Glaſtenbury*, ‘ which he cauſed to be preſented and read, ‘ not only of *William* the Firſt, of *William* ‘ the Second, and *Henry* the Firſt, his Grand-

‘ father, but alſo the Charters of the Princes his Predeceſſors of more antient Times; *viz.* the Kings *Edgar*, *Edmund*, *Edward*, *Elfred*, *Bringwalthius*, *Kenthwin*, *Baldred*, *Ina*, *Arthur*, and that Noble Prince *Cudred*, and many other Chriſtian Kings beſide; alſo of *Kenewalla*, ſometime an Heathen and Pagan King, concerning the Houſe of *Glaſtenbury*. He found, that in ſome of theſe Charters it is call'd *The Mother of Saints*; and in ſome others is named *The Grave of the Saints*, as one may ſuppoſe, from *Joſeph* of *Arimathea*'s being bury'd there with his Diſciples. And that the ſaid Place was firſt builded even by the very Diſciples of Chriſt themſelves, and by them dedicated to our Lord, as the firſt Place which he choſe to himſelf in this Realm. All which, as a Truth, King *Henry* aforeſaid eſtabliſh'd by his Charter; which *Stow* affirms to have ſeen.

‘ I think this may be enough to prove that *Joſeph* of *Arimathea* was in *Britain*, and firſt preach'd the Goſpel here; or, at leaſt, that the Goſpel was firſt taught at *Glaſtenbury*. There is the ſame Authority for believing it, as there is for believing any other Hiſtory; and for the preſent I remain your Servant unknown.

M. H.

P. S. ‘ I ſhall take an opportunity next Poſt
‘ to give you a little further Account of
‘ *Glaſtenbury*, which may help to illu-
‘ ſtrate your Curioſity about your Thorn:
‘ A Plant of which I ſhall deſire to have,
‘ and I will ſend a Gentleman to pay for it.’

Though I ſhould now proceed to give a further Account of the *Glaſtenbury* Thorn, from a very curious Letter I have received about it; as I have receiv’d another from the aforeſaid Correſpondent, continuing the Account of *Glaſtenbury*, I think it neceſſary to let them be together, as they concern the ſame Hiſtory: And as they are allow’d to be very Curious, I ſhall venture to publiſh them juſt as I receiv’d them. The ſecond Letter is as follows.

To Mr. Cowell, *Gardener at* Hoxton.

SIR, *Oxford, Jan.* 20, $17\frac{29}{30}$.

‘ IN a former Letter I gave you my Sen-
‘ timents, with the Authority of ſome
‘ good Hiſtorians, concerning *Glaſtenbury*,
‘ and the Arrival of *Joſeph* of *Arimathea*
‘ in *Britain*, which is the occaſion your
‘ Thorn is ſo famous; and I now, if you
‘ think it worth your reading, ſend you a
‘ farther Account of *Glaſtenbury*, which may
‘ ſerve to confirm what I wrote before.

‘ Immediately after my former Epiſtle, you ‘ may read, that the famous King *Arthur*, ‘ who was noted for his Bravery, and his ‘ Valiant Knights of the Round Table, was ‘ ſo much a Zealot to the Chriſtian Faith, ‘ that he gave to the Abbey of *Glaſtenbury*, ‘ (as *Rowſe* informs us) *Brentmarſh*, with ‘ other Poſſeſſions, to the Value of Five hundred Marks, (which was at that time equal ‘ to Twenty thouſand Pounds now.) He was ‘ buried at the ſame Abbey, after he had govern’d theſe Realms Twenty-ſix Years. And ‘ what is very remarkable in his Arms, are ‘ the three Crowns, which are ſo diſpoſed, as ‘ to be united with one another, as an Emblem of the Trinity. Theſe Arms, I am ‘ told, are ſince born by the Knights of the ‘ *Bath*, with the Motto, *Tria juncta in* ‘ *Uno*. If this was his Meaning, as moſt ‘ Accounts ſeem to indicate, it may be ſuppoſed he was not only a good Chriſtian, but ‘ had a ſtrong Faith in the Doctrine of the ‘ Trinity: but I leave that to be diſcuſs’d by ‘ others.

‘ About Six hundred Years after his Death, ‘ *viz.* about the Year of Chriſt 1171, *Glaſtenbury* was burnt. And in the laſt Year ‘ of *Henry* II. which was *Ann.* 1189, the ‘ Body of King *Arthur* was found buried in ‘ the Church-yard, betwixt two Pillars, ſixteen Feet deep under Ground. But thoſe ‘ that digged the Ground there to find his

'Body, after they had dug about ſeven 'Feet deep, found a mighty broad Stone, 'with a Leaden Croſs faſten'd to that part 'which lay downward towards the Corps, 'containing this Inſcription: *Hic jacet Se-'pultus inclitus Rex Arturius in Inſula 'Avalonia.* This Inſcription was graven on 'that Side of the Croſs which was next to 'the Stone, ſo that till the Croſs was taken 'from the Stone, it was not diſcover'd.

'This, as well as other Hiſtories, confirms 'that the Diſciples landed at the Iſland named '*Avalon*, where *Glaſtenbury* now is; tho' 'at preſent the Waters that ſurrounded that 'Iſland are no more ſeen, neither is the Lake 'which came to it from the Sea any longer 'viſible, being fill'd up either with the Waſh 'of the Hills about it, or drain'd by Art, ſo 'that *Glaſtenbury* is now an Inland Town. 'Where the Lake was ſaid to be, is now 'Marſhy Ground; inſomuch, that without 'a continued Series of dry Weather for many 'Weeks, 'tis unpaſſable; and even then the 'Ground bounds under one, the Surface of 'Earth in moſt places being ſcarcely ſixteen 'Inches deep before one reach the Water.

'I am the more particular in mentioning 'of theſe Matters, to remove an Objection 'which many have made againſt *Joſeph* and 'his Diſciples landing at this Place; which 'now being many Miles from the Sea, they 'ſuppoſe muſt have always been ſo. But in

‘ the time of ſome of the *Saxon* Kings, we ‘ find it was not then confirm’d Land, but ‘ a Lake or Fen, ſuch as we have many now ‘ in *England*. However, if we conſider the ‘ length of time ſince *Joſeph* of *Arimathea* ‘ came into *Britain*, which is Seventeen hundred Years, one may conclude many far ‘ greater Changes might happen than that ‘ we ſpeak of.

‘ Our Hiſtories tell us, that as ſoon as *Joſeph* of *Arimathea* and his Diſciples landed ‘ in the Iſle of *Avalon*, he preſently planted ‘ his Staff upon the Place where he landed, ‘ which grew, *&c.* as before related.

‘ But give me leave, as I have occaſionally ‘ mentioned King *Arthur*, to relate a little ‘ more of his Story. His Body was found, ‘ not incloſed in a Tomb of Stone, but within a great Tree made hollow like a Trough; ‘ the which being digged up and opened, ‘ therein were found the Bones of *Arthur*, ‘ of a marvellous bigneſs, as *Giral. Cambrenſis*, a learned Man of thoſe Times reports to have heard of the Abbot of *Glaſtenbury*, by whom he was inform’d, that ‘ the Shin-bone of *Arthur* being ſet up by ‘ the Leg of a very tall Man, came above ‘ his Knee the breadth of three Fingers. The ‘ Skull of his Head of a wonderful bigneſs; ‘ in the which Head there appear’d the Prints ‘ of ten Wounds, or more; all which were ‘ grown into one Seam, except only that

‘ whereof he died; which being greater than the other, appear’d very plain. Alſo in opening the Tomb of his Queen *Guinever*, that was bury’d with him, they found the Treſſes of her Hair whole and perfect, finely platted, of colour like to Gold, but being touch’d, fell to Duſt. The Abbot of that Houſe was named *Henry Blois*, and was Nephew to King *Henry* the Second; by whoſe Command the Tomb of *Arthur* was ſought for, and found, and removed into the new great Church, and there buried in a fair Tomb of Marble; laying the Bones of the King at the Head of the Tomb, and the Bones of the Queen at his Feet, towards the Weſt. The Leaden Croſs, with the Inſcription, as it was found and taken off the Stone, was kept in the Treaſury of *Glaſtenbury*, till the Suppreſſion thereof in the Reign of King *Henry* the Eighth.

‘ *Floriacenſis* informs us, that ſo great a Zealot in the Chriſtian Faith was *Kenulphus*, King of the *Weſt Saxons*, who lived about Seven hundred Years after Chriſt, that he new built the Abbey of *Glaſtenbury*, which was the fourth building of that Monaſtery. Beſides which, the ſaid King alſo built a fine Chapel, dedicated to St. *Joſeph*, lined and garniſh’d with Gold and Silver, with many Ornaments likewiſe of Gold and Silver; to the building of which Chapel he gave Two thouſand ſix hundred and forty Pounds of Sil-

‘ ver, and to the Altar Two hundred and ‘ ſixty-four Pounds of Gold; a Chalice, ‘ with the Patten, ten Pound of Gold; a ‘ Cenſer, eight Pound, and twenty Man- ‘ cas of Gold; Veſſels to the Altar for Wa- ‘ ter, thirteen Pound of Gold; a Baſon, eight ‘ Pound of Gold; an Holy-Water Bucket, ‘ twenty Pound of Silver; Images of our ‘ Lord, and the Twelve Apoſtles, one hun- ‘ dred and ſeventy-five Pound of Silver, and ‘ twenty-eight Pound of Gold; a Pall for the ‘ Altar, and Ornaments for the Monks, of ‘ Gold and precious Stones, ſubtily compact- ‘ ed, to an immenſe value: all which Trea- ‘ ſure he gave to that Monaſtery in the Year ‘ of Chriſt 705.

‘ It is reported in *Sca. Chron.* and by o- ‘ ther Writers, that *Etheldred*, King of the ‘ *Weſt-Saxons*, about the Year 870, went in ‘ Battle againſt two Pagan Kings, with his ‘ Brother *Aelfred*; where it was determin’d ‘ that the King, with his Army, ſhould at- ‘ tack the two Pagan Kings; and Prince ‘ *Aelfred*, with his Army, ſhould oppoſe the ‘ Pagan Dukes, who were *Danes*. The Bat- ‘ tle was began near *Chippenham*, or *Chip- ‘ penhane*, where the Chriſtian King tarried ‘ ſo long in his Prayer, that the Pagans were ‘ firſt ready for Battle; which his Brother ‘ *Aelfred* perceiving, and knowing that he ‘ muſt either retire, or fall upon his Ene- ‘ mies before his Brother came, he ſet upon ‘ them, though the Place of Battle was un-

‘ equal; for the Pagans had gotten the higher Ground, and the Chriſtians led their Battle from the Valley. It is remarkable, that in the ſame Place there was only one ſmall Thorn-tree, which had been planted from that brought over by *Joſeph* of *Arimathea*, near a Place deſigned for an Abbey to be built, as ſeveral Authors obſerve. About this Tree the Battles met and joined; where, when they had a long time fought, *Hubba*, one of the Kings, five of his Earls, and many thouſands of the Pagans were ſlain, and the others put to flight. Which Victory was attributed, by ſome of the Monkiſh Writers, to the Virtue of the Holy Thorn: Believe it that pleaſe.

‘ A great heap of Stones was laid and copped up where *Hubba* was buried, and the Place called *Hubbeſtow*. It was then the Cuſtom, when any Great Man of the Pagans was ſlain in the Field of Battle, to be bury'd in the ſame manner. And as then the Seat of War was chiefly on that ſide the Country, one can hardly go a Mile without obſerving ſome *Tumulus* or Tomb of this ſort. But the Chriſtians of Note were bury'd in Monaſteries; or, as it appears in a Manuſcript ſaid to be wrote by the Prior of *Bermondſey*, Nephew to King *Henry* the Second, who was afterwards Abbot of *Glaſtenbury*, when a Noble Chriſtian was overpower'd in the Field of Bat-

‘ tle, and could not be buried elſewhere, an ‘ Offspring of the Holy Thorn was planted ‘ as near the Place of his Fall as poſſibly ‘ could be gueſs’d.

‘ We find likewiſe that moſt of the Ab‘ beys which were ſet up after the ſame Or‘ der as that at *Glaſtenbury*, found ſome ‘ means to get an Offspring of the original ‘ Thorn from *Glaſtenbury*, and plant it in ‘ ſome conſiderable Place within their Ju‘ riſdiction: So that whoever finds, in any ‘ Hiſtory, there was a Thorn here or there ‘ that bloſſom’d on *Chriſtmas*-Day, it was ‘ likely taken from the old Stock. But at ‘ the ſuppreſſion of the Abbeys in King *Henry* ‘ the Eighth’s Time, it appears by ſome Ma‘ nuſcripts of Curioſity and Note, that theſe ‘ Thorns, among other things, tending to ‘ help the Romiſh Religion, ſhould be de‘ ſtroy’d; and therefore there are few of ‘ them remaining, but ſuch as happen’d to ‘ be overlook’d.

‘ There is nevertheleſs a large one of this ‘ kind now at *Glaſtenbury*, which, by the ‘ traditional Account, took Root from a ‘ Branch of that which was cut down when ‘ the Abbey was ſuppreſs’d; and it now con‘ tinues to blow every *Chriſtmas*: To which ‘ Place great Numbers of People reſort every ‘ Year at that time to obſerve it.

‘ This firſt Plant undoubtedly muſt have ‘ been renew’d many times, or propagated

‘ by ſome means or other in the ſpace of fifteen or ſixteen hundred Years. And there ‘ is no doubt, but all the ways of increaſing ‘ Trees, which we now practiſe, were well ‘ enough known to the Antients; witneſs *Xenophon*, *Heſiod*, and numbers of *Greek* Authors beſides, who have elegantly and judiciouſly mentioned ſeveral ways of Graffing, Laying, Planting by Truncheons, and ‘ many more Methods of encreaſing Plants ‘ than we practiſe at this time, as their ‘ Works will ſhew. So *Varro*, *Pliny*, *Paladius*, *Cato*, *Columella*, and *Virgil* who ‘ has taken from all the others, beſides his ‘ own knowledge, have given us almoſt innumerable Methods of increaſing Plants: ‘ Which indiſputably were known to us in ‘ *Britain* by means of the *Romans*, who ‘ were the firſt Gardeners of note among us, ‘ and brought over the firſt fine kinds of ‘ Fruits, as the Great Sir *William Temple* ‘ has fully proved. Then, I ſay, we may be ‘ pretty well ſatisfied that the People of this ‘ Nation, ſeventeen hundred Years ago, were ‘ not without knowledge how to plant, and ‘ increaſe Plants, as well as we do now. And ‘ I may add, that ſome Experiments have ‘ been lately mention'd as new, by Gardeners, which I can prove to be near two ‘ thouſand Years ſtanding, from antient Authors, as I have ſaid above.

‘ Before I conclude, I muſt yet obſerve, ‘ that the Remains of *Glaſtenbury-Abbey* ‘ would make as fine a Picture, as any of ‘ the famous *Roman* Antiquities, unleſs one ‘ was to take in *Trajan*'s Pillar, and two or ‘ three more Extraordinaries.

‘ Beſides the great Church at *Glaſtenbury*, ‘ which was about three parts ſtanding nine ‘ Years ago, there is the Abbot's Kitchin re- ‘ maining, made almoſt in the manner of a ‘ modern Glaſs-Houſe, with the Places for ‘ dreſſing of Meat quite round the Walls at ‘ the bottom, and one Paſſage for the Smoke ‘ in the middle of the top, which is built ‘ like a Dome or Cupola. We have likewiſe ‘ a ſmall Chapel, not more perhaps than 20 ‘ Feet long, dedicated to St. *Joſeph*, whoſe ‘ Walls are kept up ſtill, and where many ‘ Roman Catholicks pay their Devotions ‘ but within-ſide 'tis in a ruinated State. ‘ This they ſay was the Chapel built by King ‘ *Kenulph*, as before related; though others ‘ ſay of more antient Date, and on the place ‘ where the firſt Church was built.

‘ I can ſay no more to you on this curious ‘ Subject, but that when I was laſt at *Glaſ-* ‘ *tenbury*, the People told me ſomebody had ‘ bought the Abbey, and had already began ‘ to pull it down, to make what Profit he ‘ could of the Stone, which he might take ‘ out of the Ruins, for building Cottages to ‘ be rented by poor People; but ſome in my

‘ Company judged that ’twas very impoli-
‘ tickly done, becauſe the Ruins of that Mo-
‘ naſtery and the Thorn, were the only Mo-
‘ tives to bring any Trade or Cuſtom to the
‘ Place; which otherways, by means of bad
‘ Roads, and no pleaſant Country there-
‘ abouts, would never invite any one to
‘ come near.

‘ If theſe Memorandums may be of any
‘ Uſe to you, I have my deſired End; and I
‘ conclude,

SIR,

Your Unknown Friend,

and Servant,

M. H.

In the foregoing Letters, we find a great deal of the Hiſtory of *Glaſtenbury*, and its Thorn; for which I am extremely obliged to Mr. *M. H.* whoſe Deſign is ſo generous, and his Letters ſo much applauded by the curious Gentlemen who frequent my Houſe, that I am adviſed to print them in this Tract, that the Story of the *Glaſtenbury Thorn* may be the better underſtood.

The Plant, as it has been ſcarce for a long time, has made me propagate a few for the Curious in Pots, that they may be removed at any time of the Year with ſafety.

I may take notice, that the Plant I have now in my Garden is near fifty Years old, being raiſed by Mr. *Darby*, my Predeceſſor, who got it originally from *Glaſtenbury*, tho' it is not now much more than nine Feet high; but bloſſoms and buds punctually at *Chriſtmas*, as many learned Men, beſide People of Quality, can witneſs; ſome of which have paid me honourably for Sprigs of it in Bloſſom at *Chriſtmas* time.

This Plant, I may again obſerve, bloſſoms twice a Year, that is at *Chriſtmas*, and even from thoſe Bloſſoms ripens its Fruit; and the ſecond time it bloſſoms with the other White-Thorn or *May*-Buſh, in the beginning of *May*; ſo that 'tis common enough to ſee Bloſſoms, and ripe and green Fruit upon it at the ſame time: For the Fruit of the *Chriſtmas* Bloſſoms ripen in *May* and *June*, and the Fruit from the Bloſſoms in *May* ripen about *September*.

If it came from *Judea*, as it may be ſuppoſed to do, if *Joſeph* of *Arimathea* brought it as a Staff with him into *Britain*; we may conſider, as one of my Correſpondents obſerves, that at the time of our *Chriſtmas*, the Spring in and about *Judea* is equal to our *May*; and perhaps, as my Correſpondent ſays, it may attempt to bloſſom here at the time of its own natural Spring. But if we conſider, that all other Plants coming from ſo warm a Climate as that about *Judea*, require the ſhelter of an Houſe in the Winter with us to keep them alive, and this does not, and yet will flower in the moſt ſevere Froſt, and in the coldeſt Scituation, it is very admirable.

Parkinſon, who was Herbatiſt to Queen *Elizabeth* and King *James* the Firſt, juſt after the Roman Catholick Religion was ſuppreſs'd by *Henry* the Eighth, was obliged to write with Caution concerning this Plant, and drop the Hiſtory of it; becauſe, as was obſerv'd in the foregoing Letter, it is ſaid, that the Plant, as well as any thing elſe belonging to the Abbeys in the way of ſuperſtitious Worſhip, muſt be aboliſh'd. And it may be ſuppoſed that *Parkinſon* knew as well then, as People do ſince, that it was not neceſſary at all times to aggravate on ſuch an Occaſion; and therefore in a tender manner tells us, that this Plant grows at *Glaſtenbury-Abbey*, and at ſome other Places, well known to the People where they grow, though not in every Place eſteemed. But he adds, that he thinks they ought not to be *ſo ſlightly paſs'd over*, or *ſo ſmally reſpected*; *for he ſuppoſed it a ſtrange Work of Nature, or of the God of Nature rather, to cauſe ſuch a Tree, being in all parts like unto the common Haw-Thorn, to bloſſom twice every Year; the one time in* May, *as all others of the*

Kind do, and the other about Chriſtmas. *It beareth alſo after theſe Flowers are paſt green Berries, even in the Winter, before any green Leaves do appear, or Bloſſoms in* May; *ſo that it will have both green Fruit and ripe at the ſame time upon the Tree.* There hath not been obſerved any other Difference between this Kind and the ordinary Haw-Thorn. *It has been diſputed that this happens by means of ſome Hot Springs that take their courſe about the Roots of the Tree; but being wiſely ſcann'd and conſider'd, is too light, I think, to hold Weight. For how ſhould one Tree only bloſſom in a Place, and none of all the other Trees in the ſame Tract or Compaſs of the ſame Spring's running? And beſides this, there are of theſe Trees in divers Places of the Land, and upon Mooriſh Ground, though upon a Bank beaten with cold and northerly Blaſts, and expoſed to furious Winds on all ſides, having no Shelter or Defence, but ſtanding in a flat and open Soil, where I think no hot Spring either doth, or is likely to break forth or run near it.*

Let the Wiſe and Judicious ſcan it throughly, Whether this come to paſs by the Nature of the Soil and Springs, or the natural Kind of the Tree, &c.

As I have now preſented my Reader with the moſt material Remarks concerning *Glaſtenbury*, and its Thorn, I ſhall conclude this Treatiſe, with the Hopes that there is nothing in it which will not be well received by the Curious.

FINIS.

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